

BHUTAN POVERTY AND EQUITY ASSESSMENT 2024

**Sustaining Progress in Poverty and
Inequality Reduction in Bhutan**





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Inequality Reduction in Bhutan**

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FOREWORD

As Bhutan embarks on the implementation of its 13th Five Year Plan (2024–2029), the Royal Government warmly welcomes the *Bhutan Poverty and Equity Assessment 2024* as a timely and significant contribution to our national development efforts. Prepared by the World Bank in close collaboration with the National Statistics Bureau of Bhutan, this report provides a rigorous analysis of poverty and inequality trends from 2017 to 2022, offering valuable insights to inform policy decisions and support inclusive development.

The report highlights Bhutan’s remarkable progress in poverty reduction, with the national poverty rate declining from 28 percent to 11.6 percent during this period. Key drivers include robust economic growth, improved labor market outcomes, enhanced agricultural productivity, effective COVID-19 relief programs, and strong remittance inflows. These gains were further reinforced by near-universal access to basic services and notable improvements in health, education, and multidimensional poverty. Together, these achievements reflect our deep commitment to the holistic development vision of Gross National Happiness.

At the same time, the report draws attention to important areas where progress has been uneven. Poverty remains concentrated in rural areas, income inequality persists, and regional disparities in service quality continue. Bhutan also faces emerging challenges, including climate vulnerability, youth unemployment, and the outmigration of skilled workers.

Several targeted actions are being initiated to address these issues. These include integrating climate resilience across sectors through the Ecological Diversity and Resilience Programme; tackling youth unemployment through the Twenty-first Century Skilling, Economic Transformation, and Education Transformation programmes; and addressing emigration through job creation, improved working conditions, and diaspora engagement. The plan’s focus on inclusive growth, economic diversification, and resilience building aligns closely with the report’s recommendations.

The 13th FYP outlines a bold vision for a happy, prosperous, and secure Bhutan, focusing on inclusive growth, economic diversification, and resilience-building - goals that align with the findings and recommendations in this report. The insights into labor market dynamics, remittance dependence, and climate vulnerability are invaluable for guiding policy formulation and ensuring that our development trajectory is resilient and sustainable.

We extend our sincere appreciation to the World Bank for preparing this important report and for its continued partnership in Bhutan’s development journey. As we implement the 13th Plan, this report will serve as a critical policy compass—challenging us to deepen reforms, target investments more effectively, and ensure that no one is left behind. We welcome the planned stakeholder workshops and encourage policymakers, researchers, the private sector, and our development partners to use this report not only as a reflection of past progress, but as a call to action for a more equitable, inclusive, and resilient Bhutan.



Kesang Deki

Cabinet Secretary

Royal Government of Bhutan

FOREWORD

We are pleased to present the Bhutan Poverty and Equity Assessment Report, a comprehensive analysis of the strides Bhutan has made in reducing poverty and inequality, while also highlighting the challenges that lie ahead. This report is the result of a collaborative effort between the National Statistics Bureau (NSB) of Bhutan and the World Bank's Poverty and Equity Global Practice.

Bhutan has made remarkable progress in its journey towards poverty reduction and equitable growth. The national poverty rate has significantly declined, and the country has achieved near-universal access to basic services such as electricity, improved water sources, and sanitation. These achievements are a testament to the Royal Government of Bhutan's commitment to sustainable development and the well-being of its citizens.

However, the report also underscores the persistent challenges that need to be addressed to sustain and build on these gains. Geographic disparities in service quality, vulnerability to climate shocks, and the need for high-quality job creation are critical areas that require focused attention. The rural poor remain isolated from key facilities and infrastructure, bearing a larger burden of indirect costs to access vital services.

The analysis presented in this report draws from the Bhutan Living Standards Survey and innovative data sources and methodologies, providing a nuanced understanding of poverty dynamics in Bhutan. It highlights the importance of education in reducing vulnerability and poverty, and the need for targeted interventions to support the most vulnerable populations.

As Bhutan continues to urbanize and its working-age population grows, there is a unique opportunity to capture the demographic dividend. However, this requires concerted efforts to improve labor market conditions, enhance the quality of education, and promote economic diversification. The report provides several policy directions to address these challenges, emphasizing the need for a coordinated approach to support equitable growth, poverty reduction, and resilience building.

We hope that this report will serve as a valuable resource for policymakers, development practitioners, and stakeholders in Bhutan and beyond. It offers insights and policy recommendations that can guide efforts to sustain and further advance poverty reduction gains, ensuring a prosperous and equitable future for all Bhutanese.



Cécile Fruman

Acting Country Director for Bhutan
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This Poverty and Equity Assessment report is an outcome of a fruitful collaboration between the World Bank's Poverty and Equity Global Practice and the National Statistics Bureau (NSB) of Bhutan. The preparation of this report was led by Alvin Etang Ndip (Senior Economist, Poverty and Equity Global Practice), with contributions from Cheku Dorji, Paul Ervin, Ando Rahasimbelonirina and Katja Vinha. The report was prepared under the overall guidance of Ximena Del Carpio (Practice Manager, Poverty and Equity Global Practice) and Mathew Verghis (Regional Director, South Asia Prosperity Practice Group), in close collaboration with Abdoulaye Seck (former World Bank Country Director for Bangladesh and Bhutan), Cécile Fruman (Director, Regional Integration and Acting Director for Bhutan), and Adama Coulibaly (World Bank Resident Representative for Bhutan).

The report draws from several background papers that were prepared by core team members as part of the Poverty and Equity Assessment project. These background papers were authored by:

- Giovanni Vecchi, Nicola Amendola, Federico Belotti (University of Rome "Tor Vergata"), Giulia Mancini (University of Sassari), and Alvin Etang Ndip (Senior Economist, ESAPV) – (i) [Bhutan Poverty Analysis Report \(2022\)](#), (ii) [Poverty and Inequality Trends in Bhutan 2017-2022](#), (iii) [Poverty Dynamics in Bhutan, 2017–2022: Evidence from Synthetic Panels](#)
- Minh Cong Nguyen (Senior Economist, EPVGE), Ando Rahasimbelonirina (Consultant, ESAPV), and Alvin Etang Ndip (Senior Economist, ESAPV) – [Poverty Mapping in Bhutan Report 2023](#). (Small Area Estimation)
- Alvin Etang Ndip (Senior Economist, ESAPV), Ben James Brunckhorst (Research Analyst, EPVGE), Minh Cong Nguyen (Senior Economist, EPVGE) – [Present and Future Climate Risk Across Bhutan: Integrated findings on hazards, exposure, and poverty-driven vulnerability](#)
- Tshering Choki (Director, Athang Training Academy) and Alvin Etang Ndip (Senior Economist, ESAPV) - [Understanding the Challenges and Constraints of Bhutanese Youth in Accessing Employment Opportunities](#)
- Nobuo Yoshida (Lead Economist, EPVGE), Songjun Jiang (Consultant, CGEOP), Cheku Dorji (Consultant, ESAPV), and Alvin Etang Ndip (Senior Economist, ESAPV) - *Estimating Poverty in Bhutan using the SWIFT Methodology*.

The NSB team led by Tashi Dorjee (Chief Statistical Officer, Social Statistics Division), and comprising Bikash Subba (Statistical Officer), Jigme Choden (Statistical Officer), Dorji Lethro (Chief Statistical Officer), Leki Wangdi (Senior Statistical Officer), Phub Sangay (Executive Specialist), and Tshering Lhamo (Statistical Investigator Assistant), under the guidance of Sonam Tenzin (Director General), contributed substantially

through inputs to the various background papers. Several other NSB staff provided valuable inputs during numerous consultations and round table discussions of findings of the poverty and equity assessment project, including the following: Ugyen Norbu (Chief Statistical Officer), Sonam Laendup (Deputy Chief Statistical Officer), Sonam Tobgay (Senior Statistical Officer), Tandin Dorji (Officiating Chief Statistical Officer), and Mani Kumar Gurung (Statistical Officer).

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ABBREVIATIONS AND ACRONYMS

ALMP	Active Labor Market Program
BLSS	Bhutan Living Standards Survey
CEM	Country Economic Memorandum
CPI	Consumer Price Index
ESC	Employment Services Center
FPL	Food Poverty Line
GDP	Gross Domestic Product
GIC	Growth Incidence Curve
GLOF	Glacial-Lake Outburst Flood
GMD	Global Monitoring Database
GNH	Gross National Happiness
GP	Global Practice
JQI	Job Quality Index
LDC	Least Developed Country
LFS	Labor Force Survey
LMIC	Lower-Middle-Income Country
LMIS	Labor Market Information System
MoICE	Ministry of Industry, Commerce, and Employment
MPI	Multidimensional Poverty Index
NSB	National Statistics Bureau
OPHI	Oxford Poverty and Human Development Initiative
PCE	Per Capita Expenditure
PEA	Poverty and Equity Assessment
PHCB	Population and Housing Census of Bhutan
PPP	Purchasing Power Parity
RAF	Resource Allocation Framework
RGoB	Royal Government of Bhutan
SWIFT	Survey of Well-Being via Instant and Frequent Tracking
TVET	Technical and Vocational Education and Training
UBPL	Upper-Bound Poverty Line
UMIC	Upper-Middle-Income Country
WDI	World Development Indicators

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OVERVIEW

Bhutan's path to sustained poverty reduction and equality and ongoing challenges

Bhutan has made substantial progress toward ending extreme poverty and boosting shared prosperity on a livable planet (that is, the World Bank Group's revised mission), with extreme poverty nearly eradicated and the national poverty rate reduced to 12.4 percent in 2022. However, boosting productivity growth and employment, especially among youth and women, while adapting to climate change remain core policy challenges. In 2024, the Royal Government of Bhutan (RGoB) launched its 13th Five Year Plan, aiming for a happy, prosperous, and secure future for the nation. This plan emphasizes sustainable, equitable growth, and a balanced approach to economic, social, and environmental well-being. The plan accentuates the need to address key challenges such as economic vulnerability, youth unemployment, limited financial security, and institutional barriers, among others. This Poverty and Equity Assessment report aims to offer insights for policy makers, development practitioners, and stakeholders to sustain and further advance poverty reduction gains in Bhutan. It provides a comprehensive analysis of Bhutan's poverty and welfare landscape, examining trends, drivers of poverty and inequality reduction, and highlights ongoing challenges and provides policy directions to support continued progress.

Key Messages

1. Bhutan reduced poverty significantly between 2017 and 2022, but poverty remains high in rural areas and progress in urban areas shows signs of weakening.
2. Four key factors contributed to poverty reduction during this period: (i) strong economic growth, (ii) improvements in the labor market and agricultural productivity, (iii) COVID-19 pandemic relief programs, and (iv) significant remittance inflows.
3. Significant vulnerabilities persist, as a large segment of the population remains susceptible to external shocks and faces the risk of poverty or further impoverishment. Moreover, persistent geographic disparities in service delivery may constrain future development prospects.
4. Job creation is key to reducing poverty and vulnerability, but job creation has been slow and gains in productivity have been limited. Workers are searching for opportunities abroad and many are emigrating, contributing to human capital loss.

5. To continue progress, Bhutan will need to promote the creation of high-quality jobs and human capital in the workforce, address vulnerability to economic and environmental shocks, and tackle geographic challenges and disparities, particularly in the quality of and access to services across districts.

Bhutan has made remarkable progress in reducing poverty and consumption inequality, but poverty remains predominantly a rural phenomenon and income-based inequality is very high.

In recent years, Bhutan has made remarkable progress in poverty and consumption-based inequality reduction, with the poverty rate falling significantly from 28 percent to 11.6 percent between 2017 and 2022. However, poverty remains predominantly a rural phenomenon, with 87 percent of the poor residing in rural areas, and income-based inequality is very high. Based on the latest Bhutan Living Standards Survey (BLSS) implemented in 2022, Bhutan's national poverty rate was 12.4 percent (about 95,000 people), calculated using the national poverty line of Nu 6,204 per month per person. The 2022 BLSS was not strictly comparable to the 2017 BLSS. After taking measures to establish comparability between consumption aggregates and poverty measurement methodologies between the surveys, it is estimated that poverty fell from 28 percent in 2017 to 11.6 percent in 2022. Poverty reduction was noteworthy, especially in rural areas where 56 percent of the total population live. Yet poverty remains largely a rural phenomenon with 87 percent of the poor, or rather, 83,000 out of the 95,000 people living in poverty found in rural areas. Consumption-based inequality decreased significantly between 2017 and 2022 with the Gini index falling by nearly 10 points from 37 to 28.1. However, per capita income inequality shows a different picture, with Bhutan's income-based Gini index at 56 (in 2022) among the highest in the world. The relatively low consumption inequality in Bhutan indicates more equality in peoples' consumption, which reflects the fact that consumption is usually more stable and less variable than income, as households may smooth their consumption over time despite fluctuations in income. However, high income inequality indicates greater variability and disparity in income levels.

Bhutan's poverty outlook seems positive in the short term, although there are ongoing challenges that must be addressed to sustain and build on the poverty reduction gains. Real gross domestic product (GDP) growth is projected to significantly improve to 7.2 percent in FY2024/25 and 6.6 percent in FY2025/26 (Bhutan Macro Poverty Outlook, October 2024 [World Bank 2024a]). Micro simulations based on GDP projections show that poverty reduction will continue in the short term, with the

US\$6.85 per day poverty rate falling to 5.9 percent in FY2024/25 and 5.0 percent in FY2025/26. Additionally, survey-to-survey imputation methods predict poverty continued to decline throughout 2023, but national poverty reductions were driven by rural improvements and may indicate future challenges in urban areas as progress on poverty slowed and reversed slightly.

Poverty reduction was accompanied by improvements in non-monetary dimensions of welfare, but significant geographic disparities persist.

Improvements in various non-monetary dimensions also accompanied the decline in monetary poverty in Bhutan. Between 2017 and 2022, caloric intake increased by 30 percent nationally with gains realized across the consumption distribution, indicating progress in food security and consistent with the observed low levels of food poverty. Access to basic services became nearly universal in 2022, with access to improved sanitation rising from 91.5 percent to 99.1 percent of the total population between 2017 and 2022. Literacy rates among household heads increased from 56 percent to 61 percent and the share of household heads with formal education increased from 41 percent to 51 percent. Multidimensional poverty incidence fell from 5.8 percent to 2.1 percent between 2017 and 2022.

Progress on poverty in Bhutan between 2017 and 2022 was driven by (a) economic growth, (b) positive changes in the labor market and increased agricultural productivity, (c) COVID-19 pandemic relief programs, (d) and substantial remittance growth.

(a) Strong economic growth (5 percent annual GDP per capita growth from 1990 to 2019) contributed to poverty reduction. Although the economy slowed during the COVID-19 pandemic, consumption expenditure among the poor grew rapidly between 2017 and 2022. Before the onset of the COVID-19 pandemic, Bhutan had achieved strong and relatively stable economic growth as GDP per capita grew at an annualized rate of 5 percent between 1990 and 2019. However, due to the COVID-19 pandemic, Bhutan's GDP per capita declined by nearly 11 percent during 2020. Economic growth resumed in 2021 and Bhutan's GDP per capita surpassed pre-pandemic levels in 2023. Despite the contraction during the pandemic, consumption expenditure increased rapidly among the poor by over 6 percent year-over-year, contributing to poverty reduction.

(b) Agricultural productivity increased by 10 percent between 2018 and 2021, and poor households likely gained from both increases in agricultural productivity and employment in the higher value-added service sector. While the BLSS lacks information on employment and labor income, Labor Force Survey (LFS) data and alternative data sources show positive employment and productivity trends in some sectors. The percentage of employment in agriculture steadily declined between 2017 and 2022, with a noticeable drop after the pandemic. During this period, employment in manufacturing and construction remained relatively stable, while employment in the higher productivity service sector saw significant growth, increasing from 35 percent of the total workforce in 2018 to 43 percent in 2022. Despite fewer workers in agriculture, productivity rose, and by 2022, agricultural productivity was over 17 percent higher than in 2017. At the same time, the poverty rate among households that reported agricultural products as their main source of income fell rapidly by 23.7 percentage points. The increase in agricultural productivity was due to both higher value added in agriculture and fewer people working in the sector. Despite the slight decline in agricultural employment, 56 percent of poor rural households still depended on agriculture as their main income source in 2022, down from 62 percent in 2017.

(c) The 2022 BLSS was implemented during the COVID-19 pandemic, which was accompanied by a large, one-off government relief program that contributed to poverty reduction. The COVID-19 pandemic in Bhutan was accompanied by a rapid response through containment measures and support systems that appear to have limited severe health and socioeconomic impacts. Despite an economic contraction with GDP falling nearly 11 percent between 2020 and 2021, government assistance, led by the Druk Gyalpo's Relief Kidu, expanded rapidly to provide monthly income support to many Bhutanese and loan interest payment support to borrowers. Recipients of government assistance and Kidu increased rapidly from 2020 to 2021 to reach nearly 20 percent of households, up from 5 percent of households before the pandemic. The Relief Kidu program appears to have reached many of the most vulnerable, protecting many from the most devastating impacts and financial hardships. Kidu reached over 50 percent of individuals who were not employed or absent from the labor market, while 22.7 percent of the self-employed received Kidu assistance. Kidu assistance covered the majority of rural households (63.9 percent). Nearly 30 percent of individuals receiving Kidu reported to be suffering from severe COVID shock. It is estimated that without the social assistance program (that is, the Relief Kidu), the 2022 national poverty rate would have been slightly higher (13.7 percent instead of 12.4 percent), and 9,700 more people would have fallen below the poverty line.

(d) Remittances from emigration have increased significantly and have been a critical source of income for the poor, contributing to progress in Bhutan’s living standards and poverty reduction. Bhutan saw a massive increase in remittances during the COVID-19 pandemic, which contributed significantly to poverty reduction. Between 2019 and 2020, Bhutan experienced a 170.6 percent increase in inward remittances—among the highest in the world during this time (Kpodar et al. 2023). The almost threefold increase in remittances is believed to be partly driven by Bhutanese migrants returning home with their savings (Royal Monetary Authority of Bhutan 2020). Remittances from Bhutanese workers abroad were crucial to improving welfare among recipient households, increasing their total consumption and thereby significantly reducing poverty. Without remittances, it is estimated that the 2022 national poverty rate would have been substantially higher (15.6 percent instead of 12.4 percent), and 24,000 more people would have fallen below the poverty line.

This Poverty and Equity Report identifies five key challenges to sustaining progress on poverty and inequality in Bhutan.

While Bhutan has experienced dramatic poverty reduction and the outlook seems positive, there remain ongoing challenges and risks that must be addressed to sustain and build on the poverty reduction gains. This includes addressing five key challenges:

- 1. Vulnerability to Climate Shocks:** 19 percent of the population is vulnerable to poverty (that is, nearly 150,000 people) and, due to the country’s unique terrain, weather patterns, and high reliance on agriculture, climate-related risks threaten progress on poverty reduction, with nearly half of the poor exposed to landslides, and much of the country’s infrastructure and agricultural land located along drainage basins that are highly vulnerable to flooding.
- 2. Economic Shocks:** Small increases in the poverty line would lead to significant increases in poverty rates, indicating that a large share of the population lives close to poverty levels and is vulnerable to falling into poverty due to an economic shock, such as job or income losses.
- 3. Dependence on Remittances:** 14.5 percent of households in the lowest consumption quintile depend on remittances. While post pandemic, the level of remittances has remained high, remittances have been volatile, and it is estimated that a decrease in remittances could raise the national poverty rate by over 3 percentage points.

- 4. Service Quality Gaps:** Access disparities in the quality of services persist, especially in rural areas, affecting the poor disproportionately, because they have fewer opportunities to access markets and important education and health care facilities and financial institutions.
- 5. Slow Productivity and Job Growth:** Employment in agriculture has slowly declined as productivity has modestly increased, but most of the rural poor continue to rely on agriculture, where productivity remains low. Job growth in higher productivity sectors, such as industry and services, has been slow. Many workers rely on low-quality, unstable jobs with excessive hours. Skills mismatch remains a barrier to employment for 43.1 percent of job seekers. Unemployment is higher in urban areas, particularly among youth and women. Youth unemployment peaked at 28.6 percent in 2022. Many Bhutanese are searching for jobs and educational opportunities outside of the country and emigrating, leading to a loss of human capital and risking Bhutan's ability to realize the demographic dividend, as young workers enter the workforce.

This report provides several policy directions to address the key challenges facing Bhutan for sustainable poverty and inequality reduction.

The core challenges that remain for Bhutan include reducing vulnerabilities by boosting productivity growth and employment opportunities, especially among youth and women, and promoting adaptation and resilience to climate change.¹

This report identifies three key challenges that must be addressed to continue poverty and inequality reduction: (a) Promoting high-quality job creation and workforce human capital development; (b) Strengthening resilience to climate shocks, given the country's vulnerability to climate-related events; and (c) Addressing geographic disparities, especially in service access and quality across districts. Bhutan's continued progress depends on addressing these challenges and implementing targeted policies that support equitable growth, poverty reduction, and resilience building.

Several policy directions to address the country's constraints emerge from these challenges. **The policy directions are summarized in Table 1.**

¹ According to the South Asia Development Update (World Bank, October 2024), most of these challenges are common across South Asia.

Table 1. Policy directions for continued poverty and inequality reduction in Bhutan

Challenge	Constraint	Suggested policy direction
1. Promoting high-quality job creation and workforce human capital development		
Limited creation of high-productivity jobs in the private sector, which partly explain the speed and scale of recent emigration.	Wage and salaried jobs are pathways out of poverty, but the development of productive sectors outside of agriculture and the public sector has been slow.	Pursue a vertical approach to promoting the growth of promising job-rich sectors. At the same time, implement horizontal reforms across all sectors to improve the productivity of small firms and support their growth. These reforms include (a) strengthening entrepreneurship by facilitating access to finance, mentorship, and links to supply chains and markets; (b) governance reforms related to the investment climate, foreign direct investment, and the efficiency of state-owned enterprises; and (c) labor market reforms to promote flexible labor regulations that can support worker mobility and firms' access to labor as well as a functional labor market information system (LMIS) that can regularly identify skills in the labor market and support hiring needs for start-ups.
	Many workers have low-quality employment with no written contracts and high share of overwork.	
	Opportunities to assimilate youth in the private sector are limited and contribute to emigration.	
Rural workers continue to rely heavily on low-productivity agriculture.	The rural poor rely overwhelmingly on agriculture and often lack access to training to improve their productivity, to inputs and markets, and to protection against climate change vulnerabilities.	Provide a targeted, comprehensive package of economic inclusion services that includes skills training in technical areas, climate mitigation, and business and risk management practices. System links between multiple ministries can support the delivery of a coordinated package of services and maximize its impact.

Challenge	Constraint	Suggested policy direction
Limited human capital utilization, particularly of youth and urban residents	There is suboptimal allocation of labor to meet employers' hiring needs, contributing to high unemployment among youths and urban residents.	The following efforts are needed to strengthen employment support programs for youth and urban residents: (a) reorient the technical and vocational education and training (TVET) sector to improve the links with the private sector; (b) allocate appropriate resources to improve the capacity of employment services centers (ESCs) to establish relationships with local employers, engage in vacancy collection, and provide services such as on-the-job assistance, counseling, and mobility support for low-skilled workers; (c) implement programs to bridge the gap between labor supply and demand, such as on-the-job training; and (d) enhance the capacity of the existing LMIS to reduce data gaps and better understand the profiles of workers and how they align with the skills and occupations demanded by the private sector, thereby reducing skill mismatches.
Limited human capital accumulation	The productivity of Bhutan's workforce is undermined by low levels of human capital that stem in part from unequal and inadequate access to quality foundational human capital services, especially for disadvantaged households in rural areas. Many Bhutanese perceive the quality of education better abroad with more economic opportunities to support themselves during their studies, contributing to emigration and brain drain.	Improve efficiency of targeted government resources to ramp up investments in access to high-quality education, addressing spatial disparities in access. Improve the quality of higher education to be competitive internationally and implement policies that support working while studying.

Challenge	Constraint	Suggested policy direction
Female labor force participation and employment rates are low and volatile.	Social norms may reduce females' opportunities in the labor market, as women generally bear a larger burden if the household is affected by a negative shock. Maternity allowances and childcare facilities are usually inadequate, resulting in higher attrition rates of female employees.	Offer as part of existing active labor market programs (ALMPs) or by ESCs under the Ministry of Industry, Commerce, and Employment (MoICE) targeted information and awareness campaigns, as well as group training sessions on female agency, empowerment, and the benefits of women's work. Strengthen ALMPs in the short term to provide childcare subsidies for low-income families with young mothers. A medium-term agenda can focus on expanding access and improving the quality of early childhood care.
2. Strengthening resilience to climate shocks, given the country's vulnerability to climate-related events		
Climate hazard exposure, compounded by climate change, poses risks to lives, livelihoods, and assets.	Bhutan is exposed to natural hazards, including floods, landslides, cloudbursts, windstorms, cyclones, river erosion, earthquakes, glacial-lake outburst flood (GLOF), wildfire, and droughts. Most of the country's infrastructure is located along drainage basins that are highly vulnerable to flooding caused by heavy monsoon rains and glacial melt. Projected increases in days with heavy precipitation could raise the risk of flooding and affect runoff, erosion, and river discharge rates. Climate change is expected to affect water resources through loss of storage in the form of ice and changes in precipitation and flow patterns, causing more floods and droughts.	Enhance the country's resilience to climate hazards and the impacts of climate change by supporting the RGoB's whole-of-government approach to disaster risk management by (a) integrating climate and disaster resilience into critical infrastructure and buildings and (b) strengthening systems for natural disasters' early warning systems and financial resilience of property.

Challenge	Constraint	Suggested policy direction
A large share of the population remains vulnerable to poverty.	Climate shocks can lead to job loss or income loss from hazard exposure, which risk further impoverishing or pushing households into poverty.	Develop and strengthen a comprehensive, shock-responsive, and inclusive social protection system by formulating policy frameworks aimed at reducing vulnerabilities across the life cycle. Expand noncontributory benefits and advance disability inclusion to promote inclusive and sustainable social protection schemes for the disadvantaged and vulnerable. Implement interoperable welfare and information management systems. Support the preparedness of social protection systems to better anticipate and respond to shocks.
Agriculture sector is particularly vulnerable to climate shocks.	Climate change is expected to alter Bhutan's yield structure. Short-term climate-induced yield changes may temporarily increase output but risk distracting from longer-term diversification and growth opportunities.	Provide (digital) extension services and financial incentives to farmers to adopt sustainable land management practices, increasing productivity and ensuring climate-resilient agricultural production. Enhance irrigation infrastructure and eliminate regulatory obstacles to cultivate export-oriented crops on paddy land and irrigate non-paddy crops to boost productivity, enable climate change adaptation, and drive structural transformation in agriculture.

Challenge	Constraint	Suggested policy direction
3. Addressing geographic disparities, especially in service access and quality across districts		
Access to basic services has improved, but large disparities in access to quality services persist across the country.	Electricity disruptions, lack of access to 24-hour drinking water supply, and low access to reliable internet are prevalent in many areas. Across the country, the majority of households still treat water to make it safe to drink.	Continue investing in human capital and improving service delivery to boost labor productivity and create productive and high-quality jobs. Bhutan's unique terrain and dispersed population make service provision difficult and costly. Therefore, it is necessary to develop a Resource Allocation Framework (RAF) that ensures fairness, transparency, and effectiveness in resource allocation to address local development needs. Central agencies should work with local governments to implement plans that show a clear understanding of the spatial trade-offs in coverage, the cost of administering and maintaining quality services, and the effectiveness of services.
The poor and vulnerable, particularly in rural areas, are more isolated from health care and education facilities as well as financial institutions and road infrastructure.	Poor households may face high indirect costs, such as travel and accommodation costs, to attend education or visit a health care facility. Lack of road infrastructure may limit ability to access markets.	Encourage private sector participation through public-private partnerships to fund and manage infrastructure projects, leveraging private capital and expertise while ensuring public interest and accountability.

INTRODUCTION AND METHODOLOGICAL NOTES

This Poverty and Equity Assessment (PEA) provides a comprehensive analysis of the key factors identified as drivers of poverty reduction between 2017 and 2022, highlights ongoing challenges, and offers several insights and policy directions to promote inclusive and sustainable growth in Bhutan to inform policy as the Royal Government of Bhutan (RGoB) enacts its ambitious development agenda. It aims to offer insights for policy makers, development practitioners, and stakeholders to sustain and further advance poverty reduction efforts in Bhutan (drawing from the Bhutan Country Economic Memorandum, [CEM] 2024 [World Bank 2024c] and Bhutan Labor Market Assessment Report [Alaref et al. 2024]). Going forward, the expansion of high-quality jobs beyond hydropower and agriculture will prove crucial. The unique topology and climate of the country have historically exposed citizens to hazard risks that are expected to only increase in the face of climate change, which risks further impoverishing the poor and pushing the vulnerable into poverty. Delivering high-quality services and infrastructure can support both job creation and access to markets and can be coupled with the expansion of sustainable social protection and hazard risk reduction, mitigation, and resiliency measures.

Bhutan is a small, landlocked country in the Eastern Himalayas, with an estimated population of 777,224 in 2024. Governed as a democratic constitutional monarchy, Bhutan's Parliament comprises His Majesty the King, the National Council, and the National Assembly. The country is bordered by India to its east, west, and south and China to its north. Bhutan is home to a unique terrain, with altitudes ranging from 100 to 7,500 m over an area of 38,394 km² and three distinct climatic zones: the hot and humid southern belt, the cool temperate central zone, and the alpine northern region.

Bhutan's economy is largely based on hydropower and agriculture, with a gross domestic product (GDP) in Bhutanese ngultrum (BTN or Nu) of 227.814 billion in 2022. In 2022, purchasing power parity (PPP) terms this is equivalent to a GDP of US\$11.75 billion and a GDP per capita of US\$15,118. Bhutan remains largely rural, with more than 59 percent of the population living in rural areas in 2022. The country continues to urbanize as internal migration has increased the share of the population living in urban areas from 30.9 percent in 2005 to 41 percent in 2022. Over 41 percent of Bhutan's population is younger than 24 years.

Since the inception of planned development in 1961, Bhutan has achieved rapid economic growth. The country's unique development philosophy of Gross National Happiness (GNH) advocates a holistic and responsible approach to sustainable and inclusive development. Guided by this philosophy, growth has averaged over 6 percent since the 1980s, led by the economy's gradual transition from agrarian to hydro-based industries and service sectors. Bhutan graduated from least developed country (LDC) status in December 2023 and is proud to still maintain 70 percent forest cover and is committed to remaining carbon neutral.

Poverty rates have also declined over the past decades. In 2022, 12.4 percent of the population was estimated to be living in poverty based on national poverty lines (Nu 6,204 per month per person) and extreme poverty (at the international poverty line of US\$2.15 per day per person 2017 PPP) and food poverty had essentially been eliminated (World Bank 2024b). Although the poverty levels are not directly comparable, these achievements were substantial and represent a continuation of Bhutan's progress on poverty reduction between 2007 and 2017, during which national poverty fell by 24.3 percentage points.²

In addition to economic growth and poverty reduction, Bhutan has improved on other social indicators. The country, promoting access to free health care and education, has improved in terms of health and education, with life expectancy reaching 72 years and the youth literacy rate reaching 98 percent in 2022 (World Bank 2024b). Bhutan's Human Development Index score also increased from 0.582 in 2010 to 0.681 in 2022, and the incidence of multidimensional poverty decreased from 5.8 percent to 2.1 percent between 2017 and 2022 (NSB and OPHI 2023). Poverty rates in Bhutan are currently among the lowest in South Asia, only behind Maldives (World Bank 2024b).

The latest poverty figures were obtained from the Bhutan Living Standards Survey (BLSS) administered in 2022 during the COVID-19 pandemic, which was accompanied by a large, one-off relief program that likely contributed to progress on poverty during this time. The global COVID-19 pandemic and economic restrictions in Bhutan were accompanied by a rapid response through containment measures and support systems that appear to have limited severe health and social impacts. Despite an economic contraction with GDP falling by nearly 11 percent between 2020 and 2021 (World Bank 2024c), government assistance, led by the

² During this period the poverty rate fell from 36.4 percent to 12.1 percent. However, due to changes in survey implementation, these levels are not comparable to the 2022 BLSS.

Druk Gyalpo's Relief Kidu, expanded rapidly to provide monthly income and loan interest payment support to borrowers. Relief programs appear to have reached the most vulnerable, protecting many from the most devastating impacts and financial hardships. Had social assistance not expanded, poverty reduction between 2017 and 2022 might not have been as large as observed. Nevertheless, reductions in poverty and welfare gains in Bhutan were large and accompanied by improvements in other social indicators.

This Poverty and Equity Report identifies five key challenges to sustaining progress on poverty and inequality in Bhutan.

While Bhutan has experienced dramatic poverty reduction and the outlook seems positive, there remain ongoing challenges and risks that must be addressed to sustain and build on the poverty reduction gains. This includes addressing five key challenges:

- 1. Vulnerability to Climate Shocks:** 19 percent of the population is vulnerable to poverty (that is, nearly 150,000 people) and, due to the country's unique terrain, weather patterns, and high reliance on agriculture, climate-related risks threaten progress on poverty reduction, with nearly half of the poor exposed to landslides, and much of the country's infrastructure and agricultural land located along drainage basins that are highly vulnerable to flooding.
- 2. Economic Shocks:** Small increases in the poverty line would lead to significant increases in poverty rates, indicating that a large share of the population lives close to poverty levels and is vulnerable to falling into poverty due to an economic shock, such as job or income losses.
- 3. Dependence on Remittances:** 14.5 percent of households in the lowest consumption quintile depend on remittances. While post pandemic, the level of remittances has remained high, remittances have been volatile and it is estimated that a decrease in remittances could raise the national poverty rate by over 3 percentage points.
- 4. Service Quality Gaps:** Access disparities in the quality of services persist, especially in rural areas, affecting the poor disproportionately, because they have fewer opportunities to access markets and important education and health care facilities and financial institutions.
- 5. Slow Productivity and Job Growth:** Employment in agriculture has slowly declined as productivity has modestly increased, but most of the rural poor continue to rely

on agriculture, where productivity remains low. Job growth in higher-productivity sectors, such as industry and services, has been slow. Many workers rely on low-quality, unstable jobs with excessive hours. Skills mismatch remains a barrier to employment for 43.1 percent of job seekers. Unemployment is higher in urban areas, particularly among youth and women. Youth unemployment peaked at 28.6 percent in 2022. Many Bhutanese are searching for jobs and educational opportunities outside of the country and emigrating, leading to a loss of human capital and risking Bhutan's ability to realize the demographic dividend, as young workers enter the workforce.

Incorporating new and innovative data sources

The comprehensive analysis presented in this PEA included innovative approaches to measure and monitor poverty and derive insights to guide future policy directions toward continued poverty reduction. First, new data were collected during the preparation of the PEA to validate the magnitude of poverty reduction and examine the sustainability of poverty reduction using the Survey of Well-Being via Instant and Frequent Tracking (SWIFT). The SWIFT survey-to-survey imputation techniques support the large poverty declines observed in Bhutan between 2017 and 2022 and show that poverty continued to decline in 2023 at the same annual average. Second, a qualitative study was conducted to complement the Labor Force Survey (LFS) and allow for a nuanced understanding of the constraints and challenges Bhutanese youth and women face in accessing employment opportunities.³ The results highlight important educational, workplace, and behavioral solutions to support women and youth employment. Third, a rapid quantitative phone survey was also administered to better understand the reasons behind recent emigration and to assess potential solutions to retain students and workers in Bhutan. The analysis highlights the central role the labor market plays in migration decisions and how labor policies that expand quality private sector jobs and opportunities for career advancement could reduce emigration and loss of human capital. Fourth, poverty maps were produced using the small area estimation methodology. Combining the latest survey data (2022 BLSS) and the Population and Housing Census of Bhutan (PHCB 2017), subnational poverty estimates have been produced at the Gewog (town) level. The new poverty maps can be used to help assess the spatial trade-offs in sustainable development, service delivery, and poverty reduction to guide regional policy priorities to the local areas most in need. Fifth, since panel survey data are unavailable (that is, BLSS 2017 and BLSS 2022 are cross-section surveys), poverty dynamics and vulnerability are

3 This was a collaborative effort between the Poverty and Equity Global Practice and the Social Protection and Jobs Global Practice within the World Bank.

explored by constructing a synthetic panel and applying a new technical methodology (Amendola et al., 2025), shedding light on mobility in and out of poverty and the characteristics of the population who experience transitions in and out of poverty or remain where they are.

Several background papers and notes have been prepared under this PEA project, and this report draws from them to present a coherent poverty narrative for Bhutan. These include (a) Bhutan Poverty Analysis Report (2022); (b) Inequality and Poverty Trends in Bhutan, 2017–2022; (c) Small Area Estimation for Poverty Mapping in Bhutan: Gewog and Town-Level Results; (d) Poverty Dynamics in Bhutan, 2017–2022: Evidence from Synthetic Panels; (e) Understanding the Challenges and Constraints of Bhutanese Youth in Accessing Employment Opportunities; (f) Exposure and Vulnerability to Shocks in Bhutan; and (g) Estimating Poverty in Bhutan Using the SWIFT methodology.

It is important to note that the trends in poverty and inequality reported in this report deviate from official poverty rates due to the implementation of methods to establish comparability between surveys. The 2022 BLSS was not strictly comparable to the previous 2017 BLSS. Therefore, to analyze trends in poverty, comparability between consumption aggregates and poverty lines is established for this report.⁴ While the comparable poverty rate of 11.6 percent estimated for 2022 is close to the official national poverty rate of 12.4 percent, readers should consider these methodological aspects when comparing poverty, inequality, and welfare levels with results from other publications.

This report is organized as follows. Chapter 1 uses data from the latest 2022 BLSS to present the recent progress Bhutan has made on poverty reduction and welfare. Chapter 2 explores the drivers of poverty reduction and contributors to improvements in household welfare between 2017 and 2022. Despite Bhutan’s recent success, Bhutan faces several key challenges moving forward. Chapter 3 presents vulnerability to poverty and explores the relationship between poverty, vulnerability, and hazard exposure to support Bhutan in addressing vulnerability to climate shocks to improve resilience. Chapter 4 covers the challenge of tackling geographic disparities in service delivery in relation to sustaining gains in poverty reduction. Chapter 5 introduces the key challenges in the labor market in Bhutan. Chapter 6 concludes with policy directions to guide Bhutan toward sustainable poverty and inequality reductions.

⁴ An overview of the details for establishing comparability between surveys are discussed in Box 2 in this report and fully described in Nicola et al. (2023).

PART I

**Recent Progress
on Poverty
Reduction and
Welfare**



CHAPTER 1

Poverty and Inequality Trends in Bhutan between 2017 and 2022

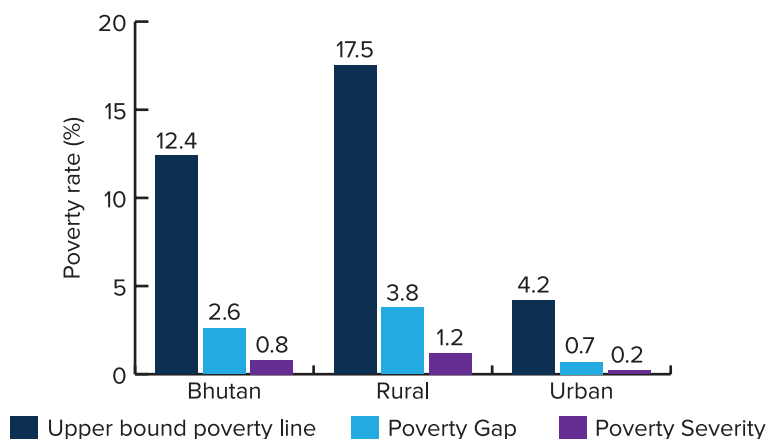
In 2022, based on the latest round of the BLSS, Bhutan's national poverty rate was estimated at 12.4 percent (Figure 1). The national poverty line for 2022 was estimated at Nu 6,204 per person per month (about US\$308 per person per month in 2017 PPP) following a cost of basic needs approach for food and nonfood requirements. The poverty gap index measures how far, on average, the consumption expenditure of those living in poverty falls below the poverty line and is expressed as a percentage of the poverty line. The poverty severity index, which is the average of the squared poverty gap index, measures the severity of poverty by putting more weight on a poor person whose consumption expenditure falls further below the poverty line. The poverty gap index and poverty severity index were estimated at 2.6 percent and 0.8 percent, respectively, in the overall population. The low poverty gap suggests that with perfect targeting, poverty in Bhutan could be eliminated for an annual cost of approximately Nu 186.6 million (US\$9.3 million 2017 PPP).⁵ Rural areas in Bhutan experience higher poverty rates compared to urban areas. Nationally, food poverty—that is, people in households with per capita consumption below food requirements—is low at 0.4 percent; it is 0.7 percent in rural areas and has practically been eliminated in urban areas.

Poverty continues to be an issue predominantly in rural areas. In 2022, 17.5 percent of the rural population lived below the poverty line (Figure 1). This underscores the fact that poverty remains largely a rural phenomenon, with 87 percent of the poor (that is, 83,000 of the approximately 95,000 people living in poverty) found in rural areas. The poverty gap in rural areas was 3.8 percent, indicating a shortfall from the poverty line compared to the national average. The poverty severity was 1.2 percent, highlighting that poverty in rural areas is more intense. The picture of urban areas differs from the rural areas. Urban areas have lower poverty levels, with 4.2 percent of the urban population living below the poverty line. The poverty gap in urban areas was 0.7 percent, while poverty severity was 0.2 percent.

⁵ While this cost assumes perfect targeting both in terms of identifying the poor and in knowing the exact level of transfer necessary to lift them out of poverty, it highlights the importance of improving targeting programs and how well-targeted poverty elimination could be achieved at a relatively low cost.

Figure 1. Poverty in Bhutan is predominantly a rural phenomenon

Poverty headcount in Bhutan in percent (2022, national poverty line)

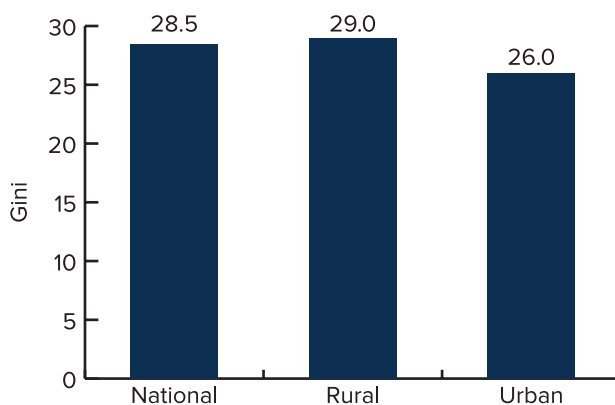


Source: Authors' calculations.

The Gini index (a measure of consumption-based inequality) in Bhutan is 28.5, with the poorest 20 percent accounting for 8.8 percent of the share of expenditure compared to 37.3 percent held by the richest 20 percent (Figure 2). In rural areas, the Gini index is higher at 29.0, suggesting that inequality is more pronounced in these regions. In urban areas, the Gini index was estimated at 26.0, suggesting that the consumption distribution is slightly more equal compared to rural areas.

Figure 2. Inequality is higher in rural areas compared to urban areas

Gini index by area (Bhutan, 2022)

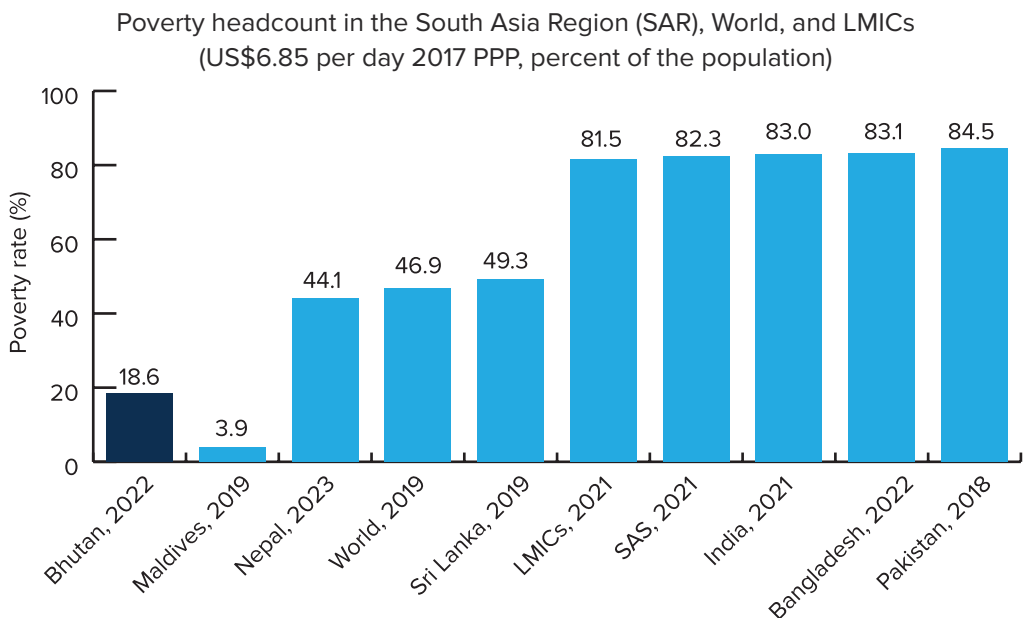


Source: Authors' calculations.

Bhutan has achieved lower poverty rates compared to its peers within and beyond South Asia and by global standards.

As of 2022, Bhutan's poverty headcount ratio at US\$6.85 per day in the international poverty line (2017 PPP) was 18.6 percent, lower than most of its regional peers (Figure 3). Bhutan had the second lowest poverty rate in South Asia, only behind Maldives, which reported a poverty rate of 3.9 percent. Bhutan's poverty rate of 18.6 percent is significantly lower than the rates of other South Asian countries. For example, India and Pakistan reported poverty rates of 83.00 percent and 84.50 percent, respectively, during the same period, while Nepal's poverty rate stands at 44.07 percent in 2023. Placing it in a global context, Bhutan's poverty rate is also lower than the global average of 46.90 percent. Moreover, the average poverty rate for lower-middle-income countries (LMICs) was 81.50 percent, and the South Asian average was 82.3 percent. This figure highlights Bhutan's efforts to reduce poverty compared with its peers in South Asia and other countries.

Figure 3. Bhutan's poverty rate is among the lowest in South Asia and among its global income peers

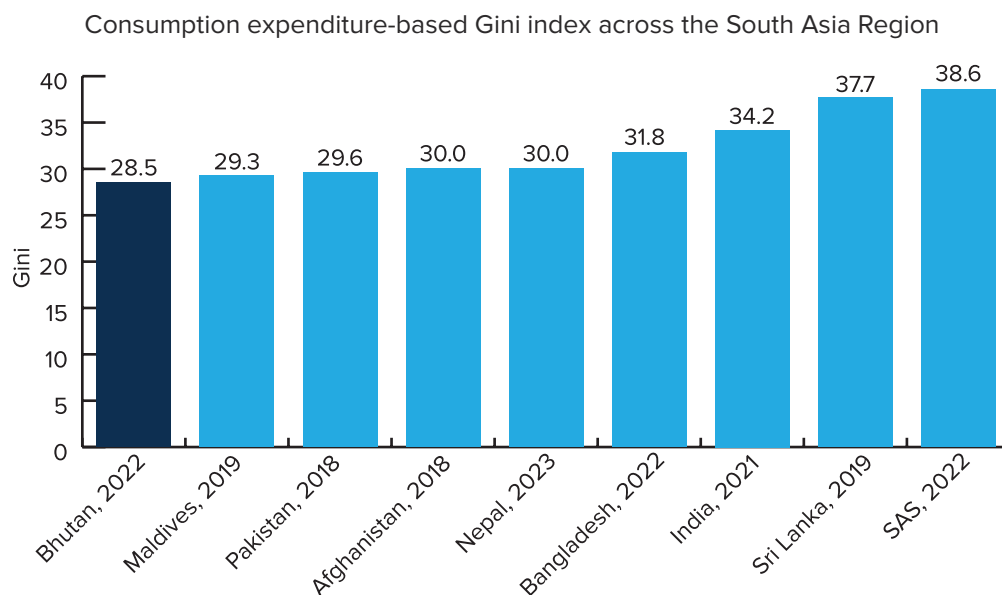


Source: Authors' calculations.

Consumption inequality in Bhutan is among the lowest in South Asia. In 2022, Bhutan's Gini index based on consumption expenditure was estimated at 28.5, notably lower than most of its neighbours in the same region (Figure 4). For instance, the

South Asia Region average in 2022 was 38.6, indicating higher levels of consumption inequality across the region. Additionally, other countries in the region, such as Sri Lanka and India, with reported rates of 37.7 and 34.2, respectively, show higher Gini index values, indicating more pronounced disparities in consumption.

Figure 4. Relative to its peers, Bhutan presents low consumption inequality levels



Source: Authors' calculations.

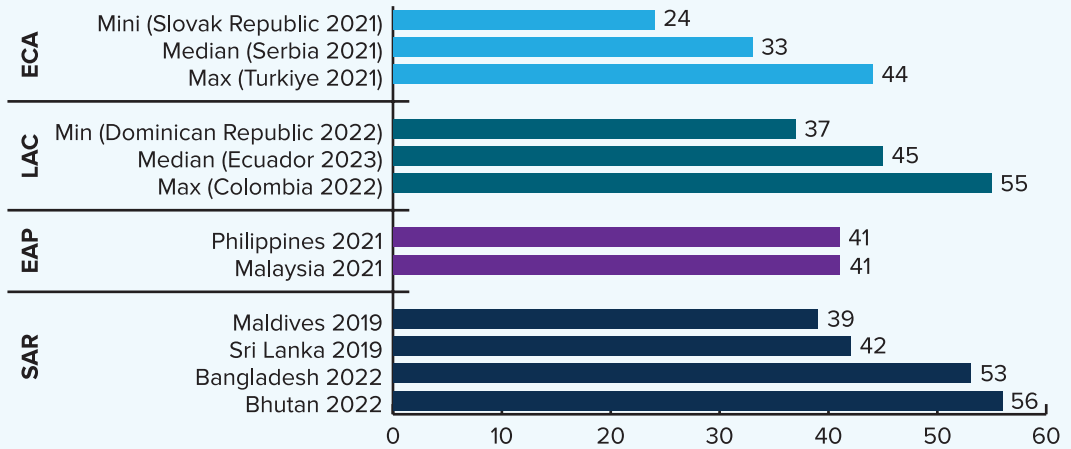
While consumption inequality is low in Bhutan, income inequality is very high, highlighting the need to foster income generation and economic opportunities accessible to everyone.

Compared to consumption inequality, income inequality shows a completely different picture of Bhutan, suggesting that the country is very unequal in terms of income among international comparators both within and beyond South Asia. In 2022, Bhutan's Gini index based on per capita income stands at 56, which is very high and among the highest in the world (see Box 1). Bhutan is comparable to only Colombia and is worse than its South Asia regional peers and other middle-income countries in other regions of the world (East Asia and Pacific - EAP, Europe and Central Asia - ECA, Latin America and Caribbean - LAC). Similarly, Gini index based on pre-tax national income suggest that Bhutan is quite unequal (Gini of 61 in 2022) and is similar to Central Asia and South East Asia (see Box 1). These findings highlight that actual income inequality is a big issue for Bhutan and should not be overlooked by focusing only on consumption inequality.

Box 1. Income-based inequality for Bhutan and international comparisons

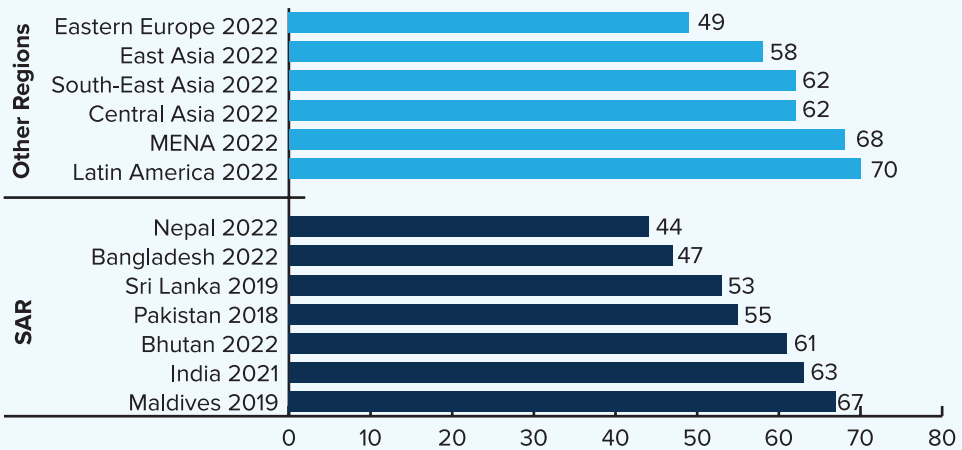
While the official measure of inequality for Bhutan is based on consumption, information on the income distribution produced by the World Inequality Lab and made available in the World Inequality Database provides estimates of inequality based on income.⁶ To facilitate comparison, the figure below includes countries from SAR, EAP, ECA, and LAC have the lowest, median (non-weighted), and highest Gini coefficients.

Figure B1.1. Gini coefficient based on per capita income



Source: South Asia Micro Database (SARMD, World Bank). Poverty, Prosperity, and Planet Report 2024: Pathways Out of the Polycrisis (World Bank 2024d).

Figure B1.2. Gini coefficient based on pre-tax national income (adults, equal split)



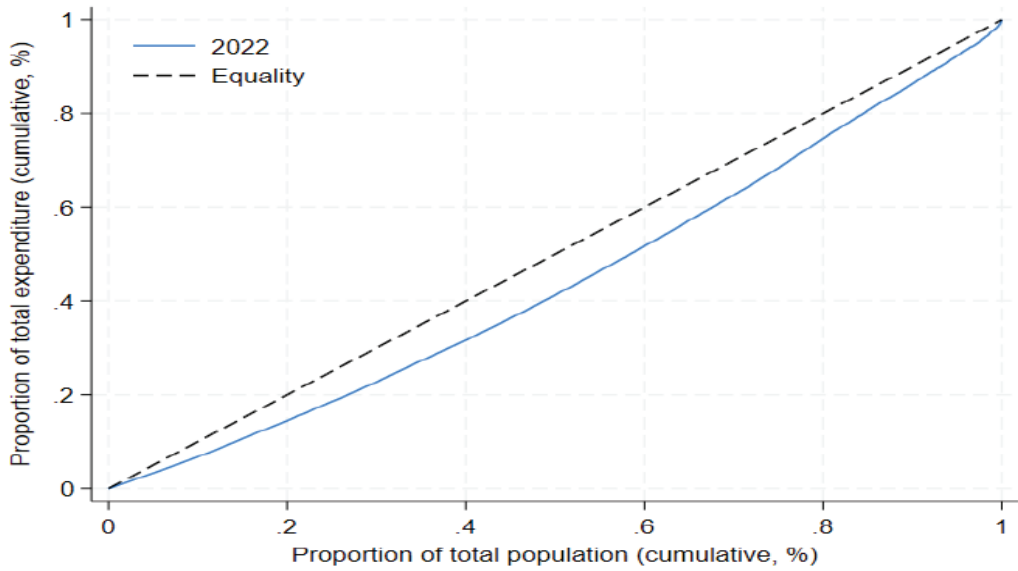
Source: WID (World Inequality Database).

6 For more information on the World Inequality Database visit <https://wid.world/>.

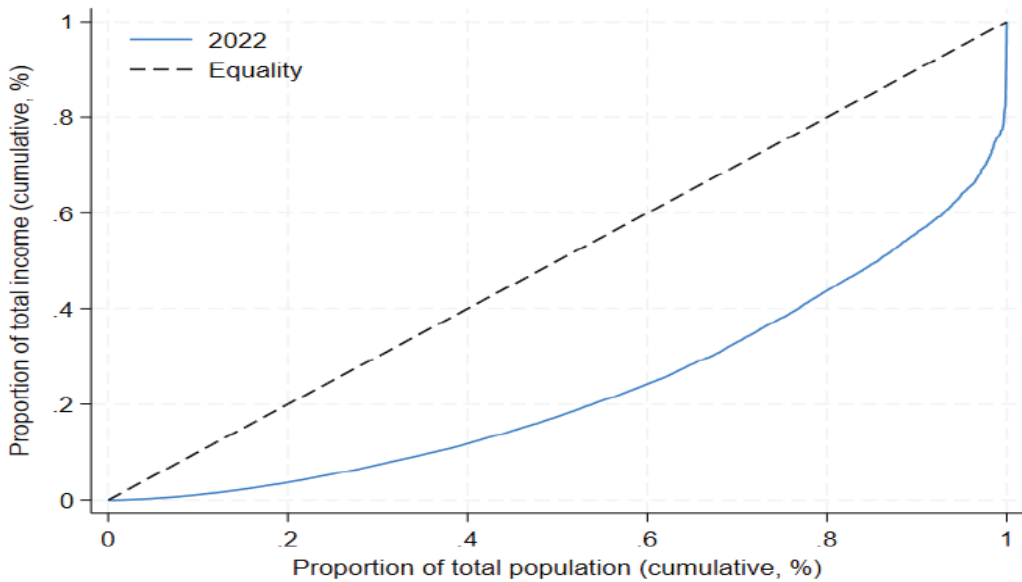
An analysis of the income distribution from the BLSS provides clear evidence that income inequality is much higher than consumption inequality in Bhutan. This can be attributed to the fact that consumption tends to be more stable and less variable than income, as households may smooth their consumption over time through savings, borrowing, and reliance on social programs or other forms of support, despite fluctuations in income. The 2022 BLSS was the first household survey to collect information on the level of household income. An analysis based on this information shows clearly that income inequality is much higher than consumption inequality across various metrics. Lorenz curves, which show the distribution of income and consumption per capita, show that income per capita is much more unevenly distributed in Bhutan. For example, the bottom 20 percent of the population account for 14 percent of consumption expenditure (Figure 5, panel a), but only 4 percent of income (Figure 5, panel b). While the top 10 percent of the population account for 15 percent of consumption (Figure 5, panel a), they account for 45 percent of income (Figure 5, panel b), clearly showing income is more concentrated in the high end of the distribution. On average, monthly consumption per capita is about 1.5 times higher than monthly income per capita (Nu 12,782 compared to Nu 8,598, respectively), but income per capita shows greater variability and disparity in income levels compared to consumption with a higher standard deviation (income per capita standard deviation of Nu 41,950 compared to Nu 7,615 for consumption). In addition to the Gini index for income per capita being significantly higher than for consumption per capita, the ratio of the 90th percentile to the 10th percentile (p90/p10) for income per capita is much higher than for consumption per capita, at nearly 13.9 compared to 3.6, respectively. Income inequality is also higher than consumption inequality across rural and urban areas.

Figure 5. Lorenz curves showing the distribution of income and consumption per capita show that income per capita is much more unevenly distributed in Bhutan

a. Lorenz curve for consumption per capita distribution



b. Lorenz curve for income per capita distribution



Source: BLSS 2022.

The poor tend to live in rural areas, have lower education levels, and rely primarily on agricultural products for income.

Poverty in Bhutan is predominantly a rural phenomenon, with approximately 87 percent of the poor residing in rural areas and showing important differences in demographics and education (Table 2). In addition to living in rural areas, poor households tend to have larger household sizes, with an average of 5.5 members compared to 3.8 members in non-poor households. Literacy rates are lower for poor households at 59.5 percent compared to 72.2 percent of the non-poor households, and only 9 percent of the poor population have obtained education beyond Grade XII compared to 27.2 percent among the non-poor. Most of the poor have no education qualification at all. For example, 59.7 percent of the poor have no education compared to 41.2 percent of non-poor households. The profile of the Bhutanese poor is similar to that of the global poor (World Bank 2024d), highlighting the importance of continued investment in education to help poor households obtain more skills and education to support income generation and break the cycle of poverty.

Table 2. The poor overwhelmingly reside in rural areas, have larger households, and have less formal education

Characteristics by Poverty Status	Poor	Non-Poor
Rural population (Distribution by poverty status)	87.0	54.0
Household Size	5.5	3.8
Literacy rates (%)	59.5	72.2
Educational attainment (%)		
No formal education	59.7	41.2
At most grade VIII	17.5	16.3
Grade IX–XII	13.8	15.3
Beyond grade XII	9.0	27.2
Access to improved water (% of households)	100.0	100.0
Access to improved sanitation (% of households)	98.2	99.4
Access to electricity (% of households)	99.1	99.7
Access to internet (% of households)	93.2	97.7
Own mobile phone (% of households)	98.6	99.8
Own television (% of households)	43.0	76.7

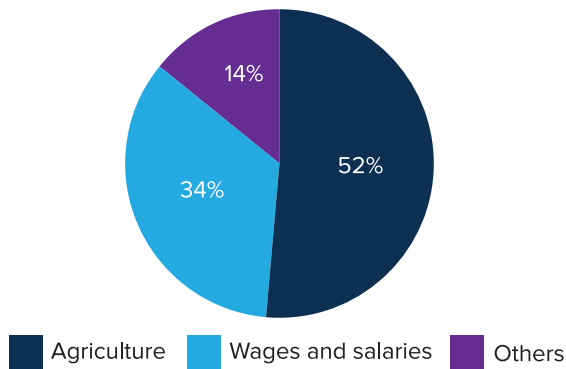
Source: Authors' calculations.

Note: Literacy is defined as individuals ages six years and above being able to write and read in either Dzongkha, English, Lhotsham, or any other language. Educational attainment applies to individuals ages 15+.

The primary source of income among poor households is agricultural products. Half (51 percent) of the poor households reported depending primarily on agriculture as their main source of income (Figure 6), while only 34 percent rely on wages and salaries, which typically offer higher and more stable income. The reliance on agriculture often makes poor households' incomes vulnerable to fluctuations in the market as well as to climate conditions.

Figure 6. Poor households primarily rely on income from agriculture

The primary source of income among poor households



Source: Authors' calculations.

Households that are objectively poor in monetary terms also feel (subjectively) poorer than others.

Subjective, self-reported poverty shows some consistent trends with monetary poverty in Bhutan. Like the 12.4 percent of households who are poor, 12.7 percent of households reported feeling poor. Likewise, perceived poverty was higher among households in rural areas at 16.6 percent compared to 6.6 percent in urban areas. Consistent with minimal extreme poverty in Bhutan, no households perceived themselves as destitute (or very poor).

The monetary poor were 2.5 times more likely to report feeling poor than the monetarily non-poor. For example, among the monetary poor, 26.8 percent reported feeling poor, while 10.7 percent of monetary non-poor felt poor (Table 3). Similarly, the monetary non-poor were nearly 2.3 times more likely to report not feeling poor than the monetarily poor. However, a large share of the monetarily non-poor and poor reported feeling neither poor nor non-poor, at 78.8 percent and 66.2 percent, respectively.

Table 3. Reducing monetary poverty may help alleviate feelings of poverty

Household distribution of subjective poverty by area and monetary poverty status (percentage of respondents)

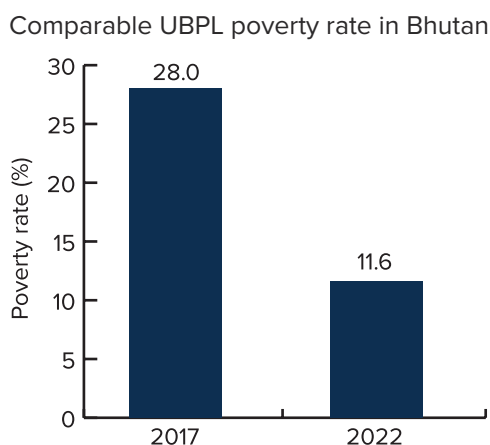
Self-reported poverty	Monetary poverty measure	
	Non-Poor	Poor
Not poor	9.4	4.1
Neither poor nor non-poor	78.8	66.2
Poor	10.7	26.8
Very poor	0.0	0.0
Don't know	0.7	2.5
Total	100.0	100.0

Source: Authors' calculations.

Establishing comparability between surveys shows poverty reduction in Bhutan was substantial between 2017 and 2022.

Between 2017 and 2022, the comparable national poverty rate in Bhutan fell 16.4 percentage points. Based on the comparable upper-bound poverty line (UBPL), poverty in Bhutan fell from 28 percent in 2017 to 11.6 percent in 2022 (Figure 7). This decline highlights the substantial progress Bhutan has achieved over these five years. These achievements were a continuation of Bhutan's progress on poverty reduction between 2007 and 2017, during which national poverty fell by 24.3 percentage points (World Bank 2019).⁷

Figure 7. Bhutan's national poverty rate more than halved between 2017 and 2022



Source: Authors' calculations.

⁷ During this period, the poverty rate fell from 36.4 percent to 12.1 percent. However, due to changes in survey implementation, these levels are not comparable to the 2022 BLSS.

Box 2. Comparability between household surveys needs to be established to analyze poverty and inequality trends.

The 2022 **BLSS** was not strictly comparable to earlier surveys. For comparability between poverty rates from the 2017 and 2022 BLSS, the following steps were taken:

- Comparable nominal consumption aggregates were constructed.
- A survey-based poor-specific price index was estimated consistent with the cost of living faced by the poor and used to compute real expenditures.
- Comparable poverty lines were estimated.

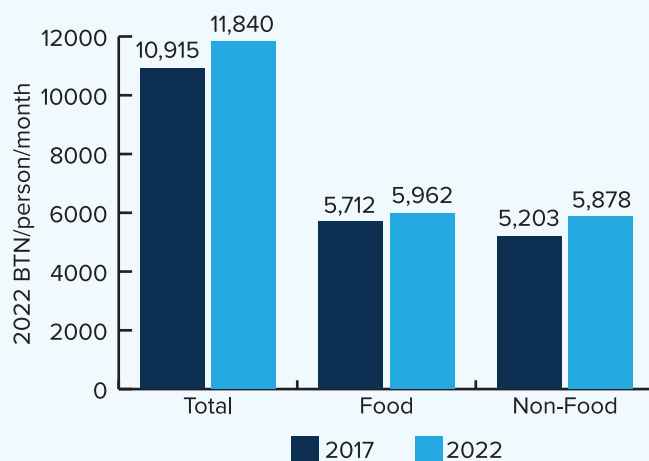
This resulted in the following comparable food poverty line (FPL) and UBPL, as well as comparable consumption expenditure:

New comparable poverty lines
(current Nu per person per month)

Poverty lines	2017	2022
FPL	1,737	2,852
UBPL	3,448	5,786

Note: The official 2022 FPL was projected back to 2017 by using the food consumer price index (CPI) estimated based on the 2017 basic needs basket.

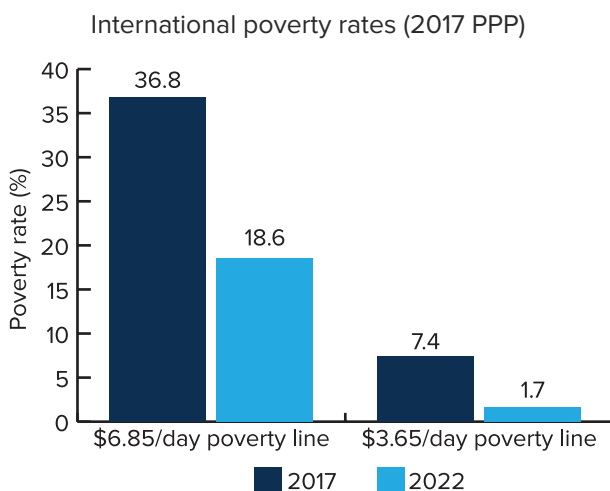
Comparable total, food, and nonfood expenditures
(Bhutan, average)



Note: The implicit total CPI is used to deflate all expenditures.

International poverty lines also confirm that Bhutan achieved substantial reductions in poverty. Poverty rates based on the US\$6.85 per day (2017 PPP) poverty line for upper-middle-income countries (UMICs) and US\$3.65 per day (2017 PPP) for LMICs fell from 36.8 to 18.6 and 7.4 to 1.7 between 2017 and 2022, respectively (Figure 8). Extreme poverty, measured at the US\$2.15 per day (2017 PPP) poverty line, was essentially eliminated over the same period.

Figure 8. Bhutan achieved a significant reduction in international poverty rates between 2017 and 2022



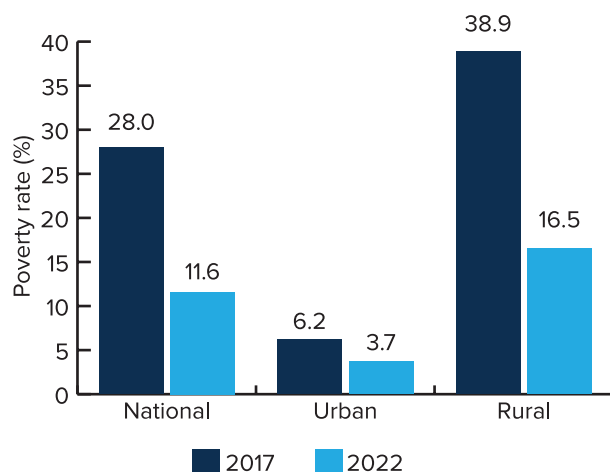
Source: Authors' calculations.

Poverty declines were significant in rural areas, where 87 percent of the poor reside.

Poverty reduction was more salient in rural areas, yet poverty remains largely a rural phenomenon, with 87 percent of the poor, or rather, 83,000 of the approximately 95,000 people living in poverty located in rural areas. From 2017 to 2022, rural poverty declined rapidly from 38.9 percent to 16.5 percent, a 22.4 percentage point reduction (Figure 9), while the urban poverty rate declined from 6.2 percent to 3.7 percent over the same period. In 2022, approximately 60 percent of Bhutan's 763,249 population resided in rural areas. Due to the high share of Bhutan's population residing in rural areas and the higher poverty rate in these areas, poverty remains largely a rural phenomenon, with most of the poor found in rural areas (Figure 10).

Figure 9. Progress on poverty reduction was substantial in rural areas

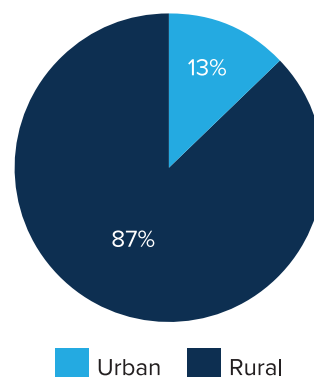
Comparable UBPL poverty rate in Bhutan by area
(2017–2022)



Source: Authors' calculations.

Figure 10. Poverty in Bhutan remains largely a rural phenomenon

Poverty distribution by area



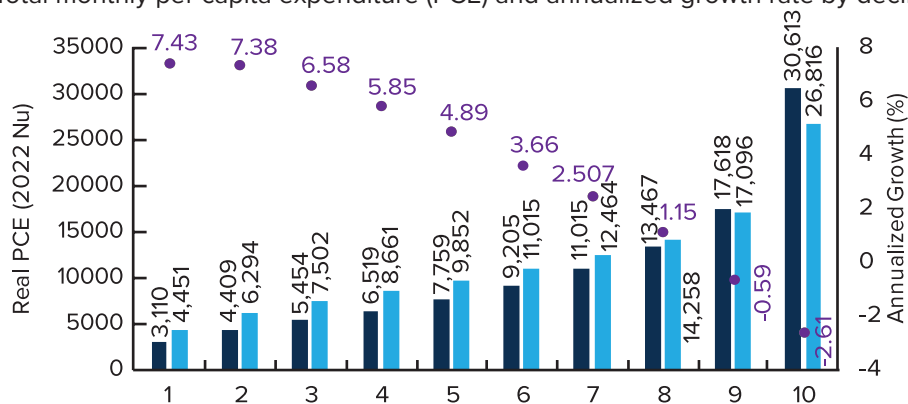
Source: Authors' calculations.

Poverty reduction was accompanied by shared prosperity and improvements in consumption inequality.

Shared prosperity between 2017 and 2022 was high because the per capita consumption expenditure of the bottom 40 percent of the population grew by 7.4 percent year-over-year compared to 1.6 percent annually for the total population. During this period, those at the lowest end of the consumption distribution saw the largest annualized percentage growth in consumption, while the richest at the top of the distribution saw modest declines in annual consumption expenditure growth (Figure 11).

Figure 11. Shared prosperity was high in Bhutan during 2017–2022 as the consumption of the bottom 40 percent grew by 7.4 percent year-on-year compared to 1.6 percent annually in the total population

Total monthly per capita expenditure (PCE) and annualized growth rate by decile

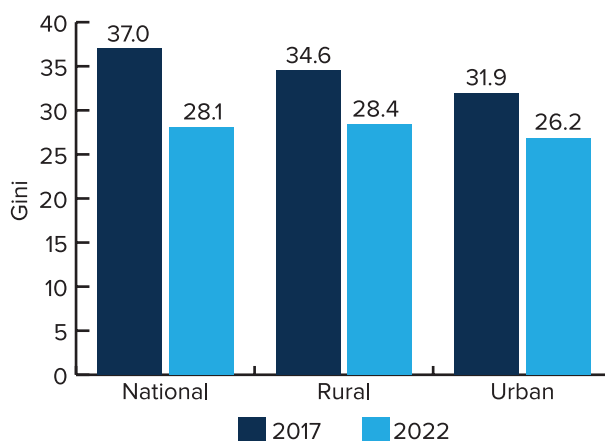


Source: Authors' calculations.

Consumption inequality decreased rapidly in Bhutan between 2017 and 2022, with the Gini index falling by nearly 10 points. Nationally, the Gini index declined from 37 in 2017 to 28.1 in 2022 (Figure 12). This decline in inequality was also observed across rural and urban areas in Bhutan. The Gini index in rural areas declined from 34.6 to 28.4, and in urban areas, it fell from 31.9 to 26.2. Improvements in inequality in both rural and urban areas were consistent with other inequality measures, such as the generalized entropy, indicating robust reductions in consumption inequality.

Figure 12. Bhutan experienced a significant reduction in inequality between 2017 and 2022

Consumption inequality in Bhutan (Gini, 2017–2022)



Source: Authors' calculations.

Government assistance expanded rapidly during the COVID-19 pandemic and likely contributed to poverty reduction between 2017 and 2022.

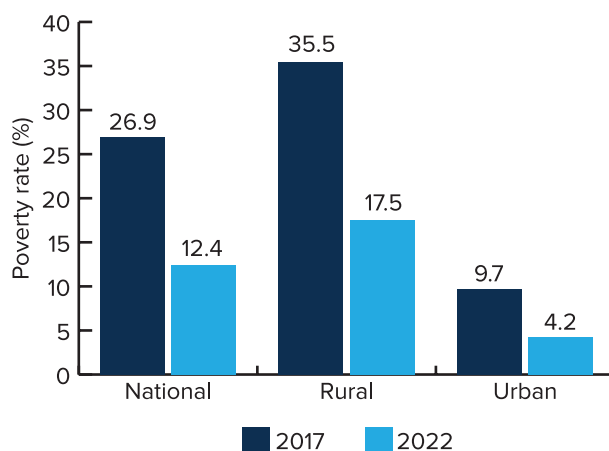
The latest poverty figures were obtained from the 2022 BLSS administered during COVID-19, which was accompanied by a large, one-off relief program that likely contributed to progress on poverty during this time. The global COVID-19 pandemic and economic restrictions in Bhutan were accompanied by a rapid response through containment measures and support systems that appear to have limited severe health and social impacts. Despite an economic contraction with GDP falling by 10.2 percent between 2020 and 2021 (World Bank 2024c), government assistance, led by the Druk Gyalpo's Relief Kidu, expanded rapidly to provide monthly income and loan interest payment support to borrowers. Relief programs appear to have reached the most vulnerable, protecting many from the most devastating impacts and financial hardships. Had social assistance not expanded, poverty reduction between 2017 and 2022 might not have been as large as observed. Nevertheless, reductions in poverty and welfare gains in Bhutan were large and accompanied by improvements in other social indicators.

Poverty trends are consistent with other poverty measurement approaches, such as survey-to-survey imputation and projections based on macroeconomic forecasts.

Survey-to-survey backward imputation from 2022 to 2017 shows robust poverty improvements. To further explore Bhutan's substantial progress on poverty reduction, a survey-to-survey imputation approach was implemented. This approach, referred to as the Survey of Well-Being via Instant and Frequent Tracking (SWIFT) method, consists of backward imputation of the survey to estimate past levels of poverty based on recent data. While this method does not replicate the exact official poverty estimates when imputed into other (out-of-sample) survey years, it provides an estimate of comparable household consumption expenditure and poverty rates that can be used to explore trends (Yoshida et al., 2015). The results from this method provide additional evidence that the substantial poverty declines estimated during this period are not spurious but are related to improvements in poverty predictors and true poverty reduction (Figure 13).

Figure 13. Survey-to-survey backward imputation shows large poverty declines between 2017 and 2022, consistent with observed poverty estimates

Poverty rates derived from survey-to-survey imputation (based on the national poverty line)

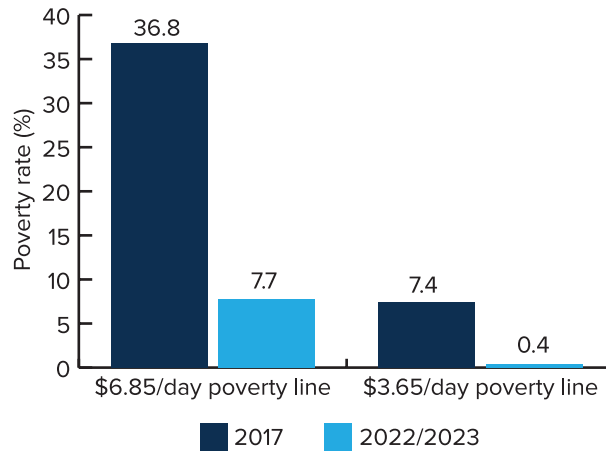


Source: Authors' calculations.

Forward projection from 2017 to 2022 based on macroeconomic trends also predicts large poverty improvements. In addition to the survey-to-survey backward imputation method, macroeconomic trends are used to forecast the poverty rate in 2022/2023. According to the Macro Poverty Outlook, the poverty rate at US\$6.85 per day is forecasted to decline significantly from 36.8 percent in 2017 to a projected rate of 7.7 percent in 2022/2023 (Figure 14). For poverty at US\$3.65 per day, macroeconomic projections estimate improvements from 7.4 percent in 2017 to 0.4 percent in 2022/2023. While these forecasts slightly overestimate the observed poverty estimates in 2022, they provide further evidence that poverty reductions are robust to other economic trends in Bhutan.

Figure 14. Macroeconomic projections are in line with large reductions in poverty estimates in Bhutan between 2017 and 2022

Forecast poverty rate from 2017 to 2022/2023 according to the Macro Poverty Outlook (October 2024)



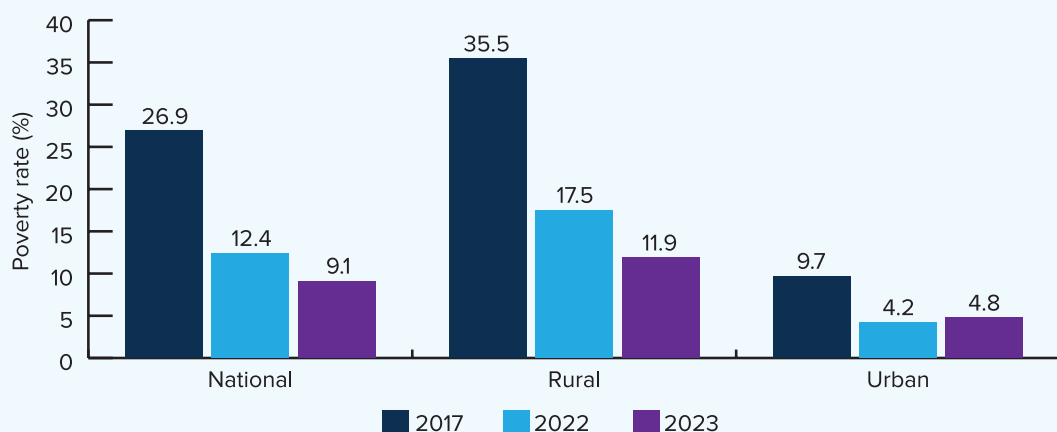
Source: Authors' calculations. Macro Poverty Outlook (World Bank 2024a).

Box 3. Poverty estimates from survey-to-survey based SWIFT methodology on new data suggest poverty further declined in 2023.

Survey-to-survey estimates, using the SWIFT methodology on data collected in 2023, indicate that poverty continued to decline in 2023, led by further declines in rural areas, while poverty reduction is expected to have stagnated in urban areas. The most recent SWIFT data estimate that the poverty rate in Bhutan will continue to decline. The rural poverty rate is estimated to continue to decline from 17.5 percent in 2022 to 11.9 percent in 2023 (Figure B3.1). In contrast, the estimation for urban areas shows a different picture. The poverty rate is expected to increase slightly from 4.2 percent in 2022 to 4.8 percent in 2023. This increase may be a potential challenge for Bhutan's government and an opportunity to address it as the country continues to urbanize.

Figure B3.1. Poverty projections estimate that poverty will continue to fall in 2023

Survey-to-survey imputed poverty rates (based on the national poverty line)



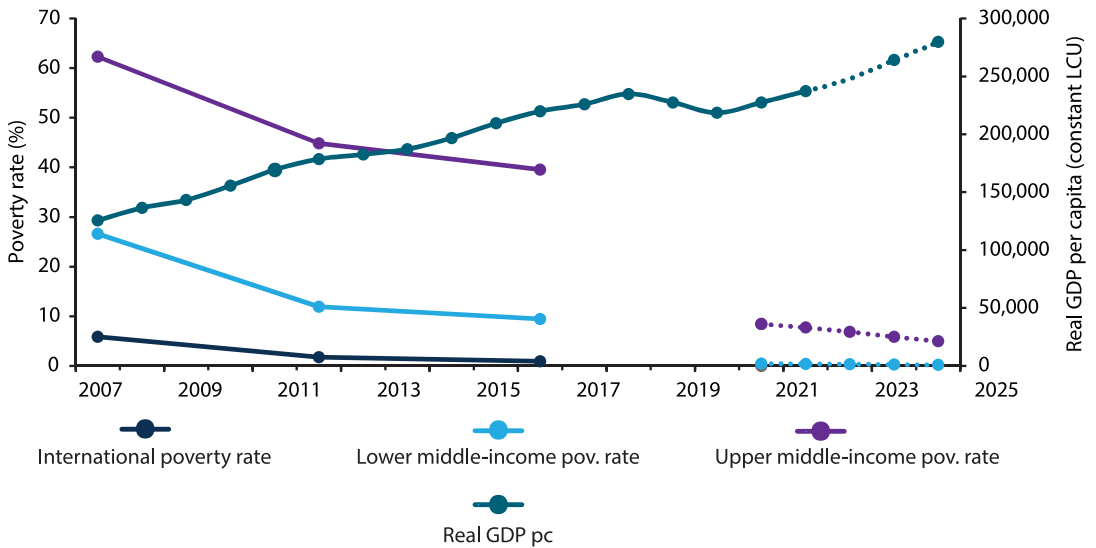
Source: Authors' calculations.

Poverty outlook seems positive although there are risks to sustaining poverty gains.

The outlook for poverty in Bhutan is positive, with continued progress expected, although there are ongoing challenges that must be addressed to sustain and build on the poverty reduction gains. Real GDP growth is projected to significantly improve to 7.2 percent in FY2024/25 and 6.6 percent in FY2025/26 (Macro Poverty Outlook; World Bank, October 2024a). Based on micro simulations using GDP projections, poverty reduction is expected to continue, with the US\$6.85 per day

poverty rate falling to 5.9 percent in FY2024/25 and 5.0 percent in FY2025/26 (Figure 15). However, challenges remain, particularly in addressing geographic disparities and inequalities, persistently weak local economic opportunities, and vulnerabilities to climate shocks. For example, a substantial share of the population (19 percent of total population or 150,000) remains vulnerable to poverty due to climate change hazards, with nearly half of the poor exposed to landslides.

Figure 15. Actual and projected poverty rates and real GDP per capita



Source: Authors' calculations based on macro projections (Macro Poverty Outlook; World Bank 2024a).

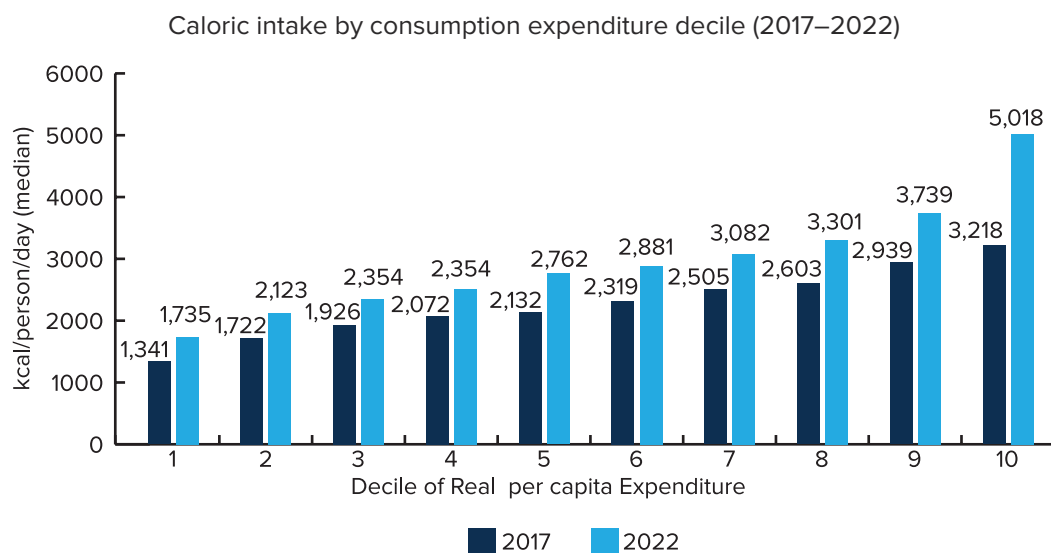
Note: (a) Calculations using 2022 BLSS. Actual data: 2022. Nowcast: 2023. Forecasts are from 2024 to 2026. (b) Projection using neutral distribution (2022) with pass-through = 0.7 (Low [0.7]) based on GDP per capita in constant Local Currency Unit (LCU).

Poverty reduction is consistent with gains in other welfare metrics and non-monetary dimensions of poverty.

Improvements in other welfare metrics, such as the calorie intake of the population, have also accompanied the impressive decline in poverty levels in Bhutan. Calorie intake (median kcal per person per day) increased by 30 percent nationally between 2017 and 2022, with gains realized across the expenditure distribution (Figure 16). The increase in calorie intake levels can be observed in all the deciles of the expenditure distribution, indicating an improvement in the calorie intake of all the segments of Bhutan's population. This is consistent with very low levels of food poverty, mostly in rural areas (affecting less than 1 percent of the population), indicating that most of the Bhutanese people can meet their basic nutritional needs, showing how poverty

reduction in Bhutan has been accompanied by gains in caloric intake and reductions in food poverty.

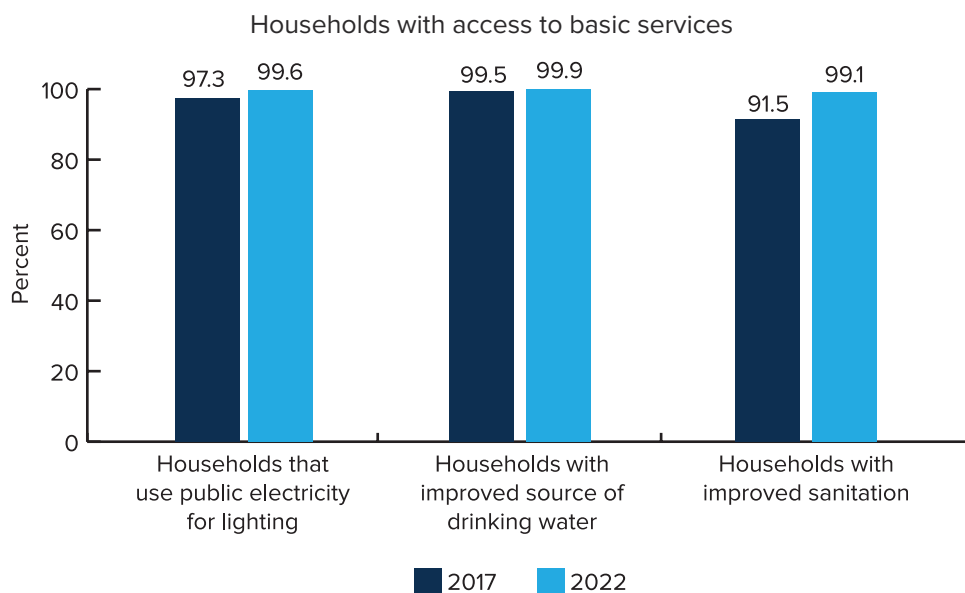
Figure 16. Between 2017 and 2022, the population of Bhutan experienced an increase in caloric intake



Source: Authors' calculations.

In addition to poverty reduction and increases in caloric consumption, Bhutan has also seen improvement in access to basic services and other social indicators. As of 2022, nearly all households now have universal access to basic services, such as electricity, improved sources of drinking water, and sanitation (Figure 17). The largest progress has been the improved access to sanitation, with an increase from 91.5 percent in 2017 to 99.1 percent in 2022. Additionally, households' access to public electricity went up from 97.3 percent in 2017 to 99.6 percent in 2022. Access to services is critical for the general well-being of the population and these numbers show how most Bhutanese households now have access to these vital services.

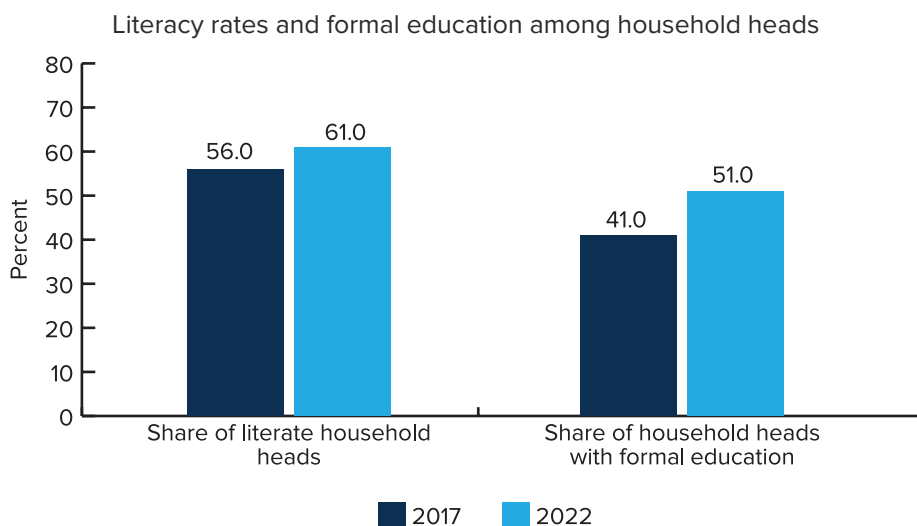
Figure 17. As of 2022, access to basic services is near universal in Bhutan



Source: Authors' calculations.

Literacy rates and formal education among household heads also improved. The literacy of household heads in Bhutan increased from 56 percent in 2017 to 61 percent in 2022 (Figure 18). Accompanied by improved literacy rates, the share of household heads with formal education increased from 41 percent in 2017 to 51 percent in 2022.

Figure 18. Literacy and levels of formal education of household heads improved between 2017 and 2022

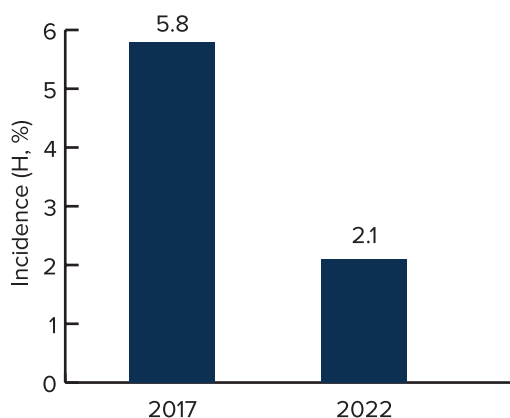


Source: Authors' calculations.

The multidimensional poverty incidence, calculated by the Oxford Poverty and Human Development Initiative (OPHI), also fell from 5.8 percent to 2.1 percent between 2017 and 2022 (Figure 19). The multidimensional poverty rate, which incorporates 13 non-monetary indicators of poverty, such as child mortality, food security, schooling, access to services, and asset ownership, among others, within three dimensions, including health, education, and living standards, has shown a significant decline. Reductions in deprivations were strong across indicators (Figure 20), showing Bhutan's success in reducing multidimensional poverty in the country.

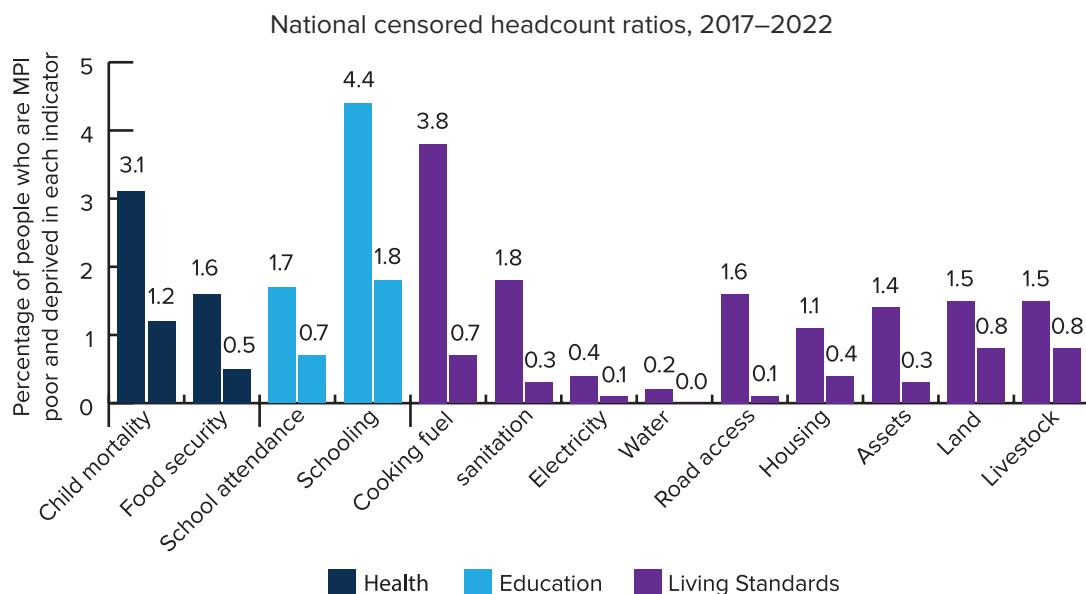
Figure 19. Along with monetary poverty, multidimensional poverty also fell between 2017 and 2022

Incidence of multidimensional poverty in Bhutan based on the original Multidimensional Poverty Index (MPI), 2017–2022



Source: NSB and OPHI 2023.

Figure 20. Gains in multidimensional poverty were observed across indicators and dimensions



Source: NSB and OPHI 2023.

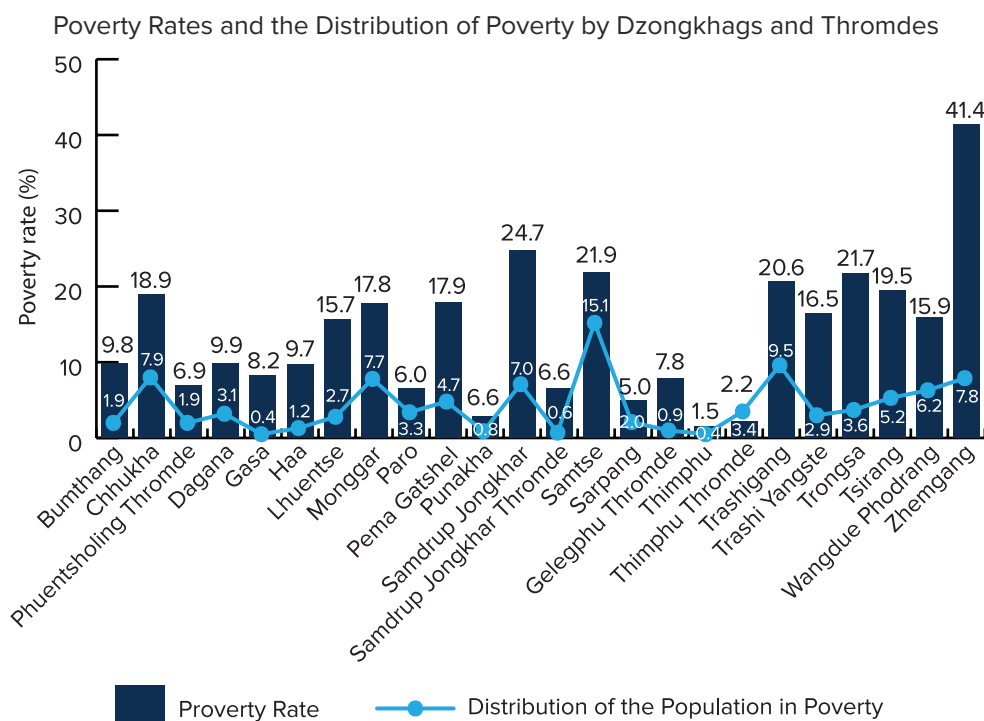
Despite a large reduction in poverty, there remain significant disparities in poverty across districts (Dzongkhags).

Poverty rates vary significantly across Dzongkhags, with the highest poverty rates in Zhemgang, Samdrup Jongkhar, Samtse, and Trongsa, while the largest share of the poor lives in Samtse and Trashigang (Figure 21). Even though great efforts have been made toward poverty alleviation, disparities continue to persist when comparing the poverty rates between districts. For example, Zhemgang reports the highest poverty rate at 41.4 percent, followed by Samdrup Jongkhar at 24.7 percent and Samtse and Trongsa at 21.9 percent and 21.7 percent, respectively. In contrast, the lowest poverty rates are in the districts of Thimphu (home to the capital city of Bhutan of the same name), Punakha, and Sarpang, with rates of 1.5 percent, 2.9 percent, and 5 percent, respectively. The significant disparities in poverty across districts present a challenge for Bhutan and the need for targeted intervention.

In terms of the distribution of people in poverty, the largest share of the poor lives in Samtse and Trashigang (Figure 21). The district of Samtse, even though it has a lower poverty rate than Zhemgang (21.9 percent compared to 41.4 percent), is home to a higher share of the total poor, with 15 percent of the total population in poverty residing in Samtse compared to just over 7 percent in Zhemgang. This is followed by

the district of Trashigang, where nearly 10 percent of the population living in poverty is concentrated. This underscores the need for Bhutan to devise focused poverty intervention efforts that consider both poverty rates and the concentration of the poor in different areas.

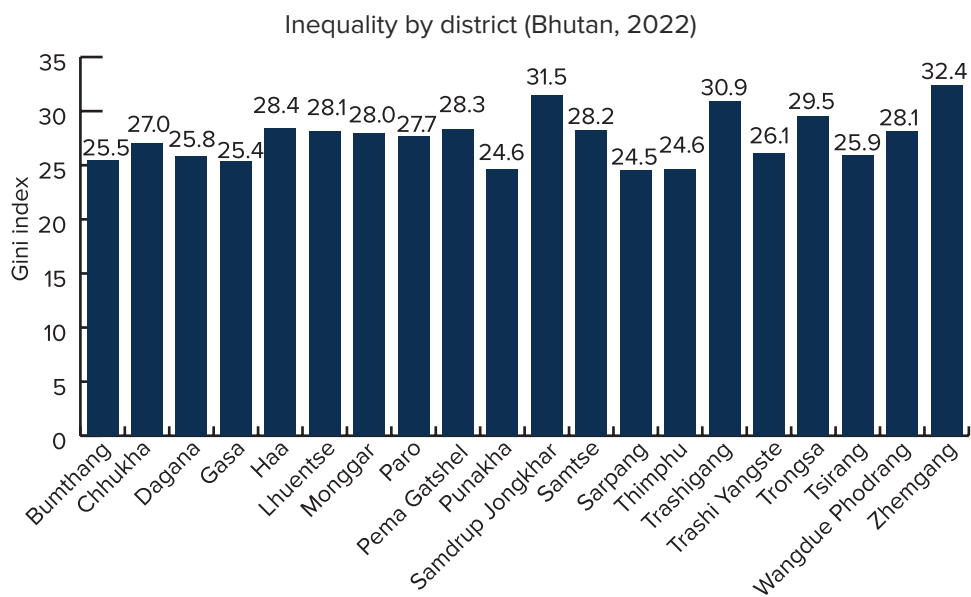
Figure 21. Poverty rates and the distribution of the population in poverty vary significantly across Bhutan



Source: Authors' calculations.

Similar to poverty, inequality also varies widely by district, ranging from 32.4 in Zhemgang to 24.5 in Sarpang (Figure 22). The district of Zhemgang, which has the highest poverty rate, also shows the highest level of consumption inequality with a Gini index of 32.4. On the other hand, Sarpang, one of the districts with the lowest levels of poverty, shows the lowest level of inequality with a Gini index of 24.5. These variations across the country highlight the need to devise targeted programs to tackle both poverty and inequality across the country.

Figure 22. Inequality, like poverty, varies significantly across the districts of Bhutan



Source: Authors' calculations.



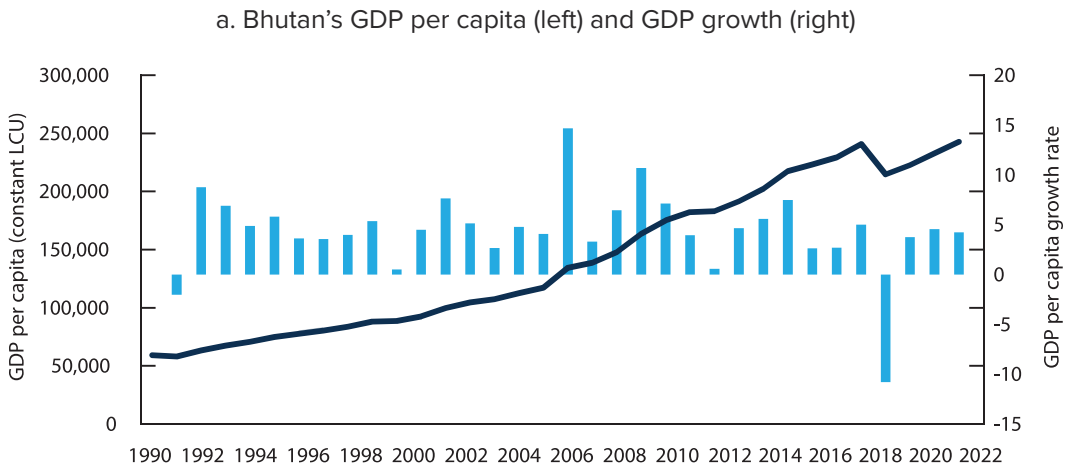
CHAPTER 2

Drivers of Poverty Reduction

Despite an economic slowdown during the COVID-19 pandemic, Bhutan achieved poverty reduction as the incomes of the poor grew between 2017 and 2022.

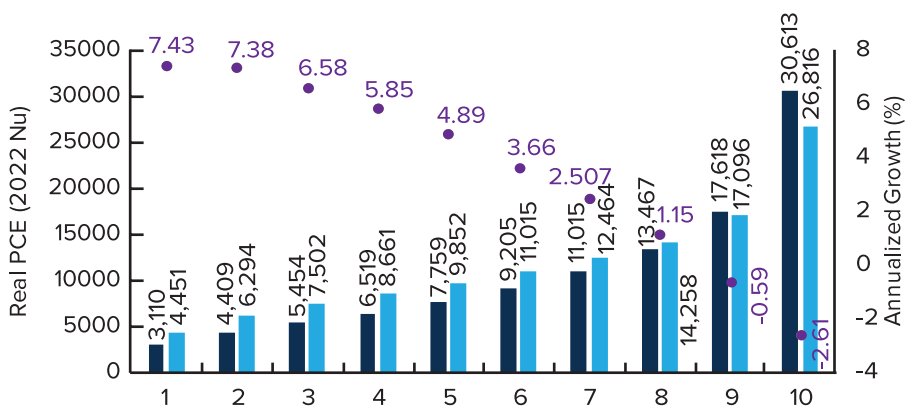
Strong economic growth contributed to poverty reduction. From 2017 to 2022, the per capita consumption expenditure of those at the bottom of the consumption distribution grew by over 7 percent year-over-year, while the richest saw annualized declines of 2.6 percent. Before the onset of the COVID-19 pandemic, Bhutan had achieved strong and relatively stable economic growth as GDP per capita grew at an annualized rate of 5 percent between 1990 and 2019 (Figure 23, panel a). However, due to the COVID-19 pandemic, Bhutan's GDP per capita declined by nearly 11 percent in 2020 before resuming growth in 2021. Despite the contraction during the pandemic, consumption expenditure increased among the poor, leading to poverty reduction (Figure 23, panels b and c).

Figure 23. Although Bhutan's GDP per capita decreased in 2020 due to the pandemic, economic growth resumed in 2021 and the consumption expenditure of those in the poorest end of the distribution grew rapidly, leading to reductions in poverty between 2017 and 2022



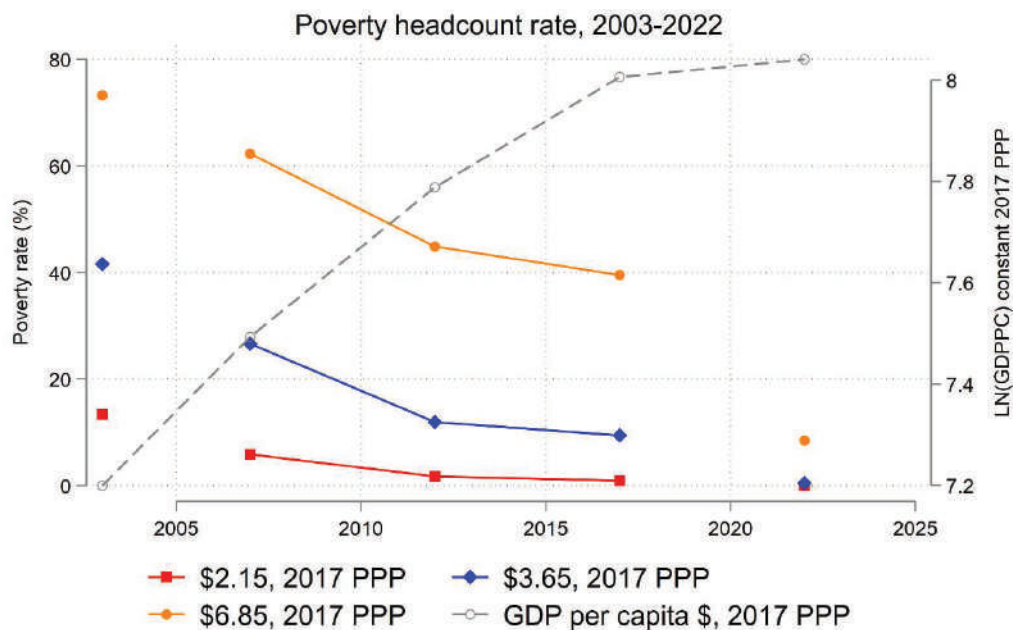
Source: Authors' calculations based on data from the World Development Indicators (WDI) and Bhutan National Accounts.

b. Total monthly PCE and annualized growth rate by decile



Source: Authors' calculations.

c. International poverty rates and GDP

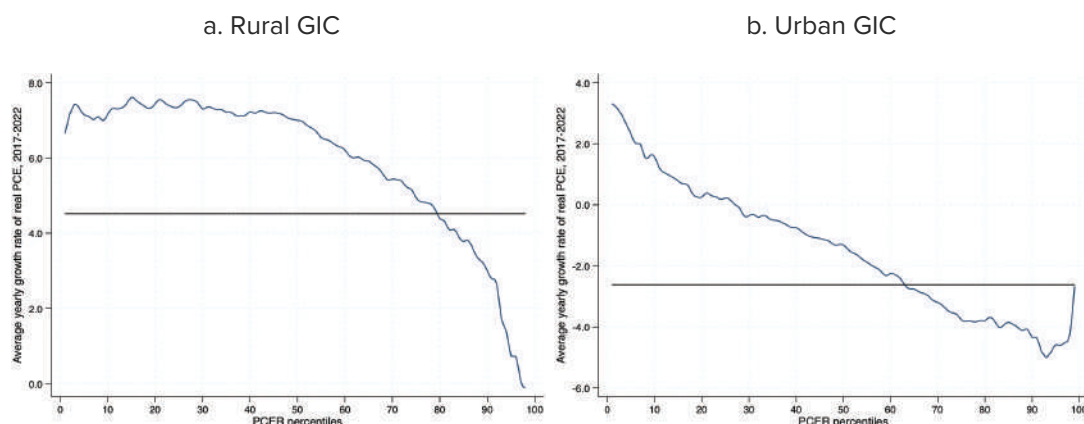


Source: World Bank using WDI and GMD (consumption-based from BLSS surveys)

Source: World Bank using WDI and GMD (consumption-based from BLSS surveys).

The significant pro-poor consumption growth between 2017 and 2022 was particularly pronounced in rural areas, where the majority of poor households reside. While the national growth incidence curve (GIC) shows significant pro-poor expenditure growth between 2017 and 2022, consumption expenditure growth among the rural poor was over three times faster than that of the urban poor (Figure 24). For example, consumption expenditure in the bottom of the distribution grew annually by over 7 percent in rural areas and around 2 percent in urban areas. Nevertheless, consumption growth was significantly pro-poor in both areas, as consumption expenditure growth among those in the bottom of the distribution was significantly higher than those at the top.

Figure 24. Consumption growth has been pro-poor between 2017 and 2022



Source: Authors' calculations.

Decompositions of changes in poverty between redistribution, or rather changes in the distribution of consumption expenditure and growth, further support the fact that redistribution was a key contributor to poverty reduction in Bhutan between 2017 and 2022. Datt-Ravallion decompositions of changes in poverty over this period suggest that approximately 77 percent of poverty reduction was due to redistribution, while consumption growth accounted for the remaining 23 percent⁸ (Table 4). This is consistent with the sharp increase in consumption expenditure per capita of those at the low end of the distribution relative to those at the high end.

8 Datt and Ravallion 1992

Table 4. Redistribution was a key contributor to poverty reduction in Bhutan between 2017 and 2022**Datt-Ravallion decomposition, 2017-2022**

	Base year 2017	Base year 2022	Average effect
Poverty rate (P_0)	28.00	11.60	
Change in P_0	-16.39	-16.39	-16.39
Growth component	-4.00	-3.47	-3.74
Redistribution component	-12.92	-12.39	-12.66
Interaction component	0.53	0.53	0.00

Note: Expenditures underlying the decomposition are expressed in 2022 prices, using the implicit deflator or implied by the new 2017 and 2022 UBPLs.

Source: Authors' calculations.

Poverty reduction was driven by rural households relying on agricultural income.

Sectoral decompositions support the fact that the observed poverty reduction between 2017 and 2022 was essentially a rural phenomenon, and the contribution of households relying primarily on agricultural incomes was important. Following Ravallion and Huppi (1991),⁹ decompositions of the relative contributions of changes in poverty within population subgroups and changes in population shares across household primary income sources were used to explore changes in poverty in urban and rural areas as well as between subgroups according to the main source of income reported by interviewed households. Decomposition results show that rural poverty declines were the primary contributor to national poverty reduction, and poverty reduction among households relying on income from agricultural products played a key role in this overall poverty reduction (Table 5). It is important to note that due to a lack of information on levels of income in the 2017 BLSS, the decomposition highlights that poverty reduction was the highest among rural households reporting agricultural products as their primary income source, but not that poverty reduction was driven by increases in income from these sources. For example, a household relying on agricultural products as their primary sources of income may have also received secondary income sources from social transfers and/or remittances, among others, that contributed to poverty reduction.

9 Ravallion and Huppi 1991

Table 5. Decompositions suggest poverty reduction was driven by rural declines among households relying on income from agricultural products.

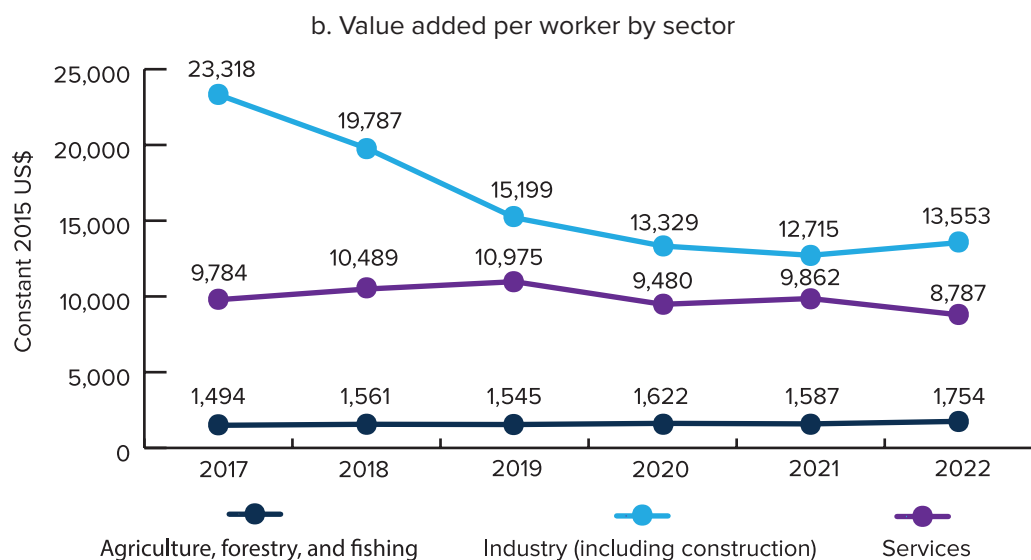
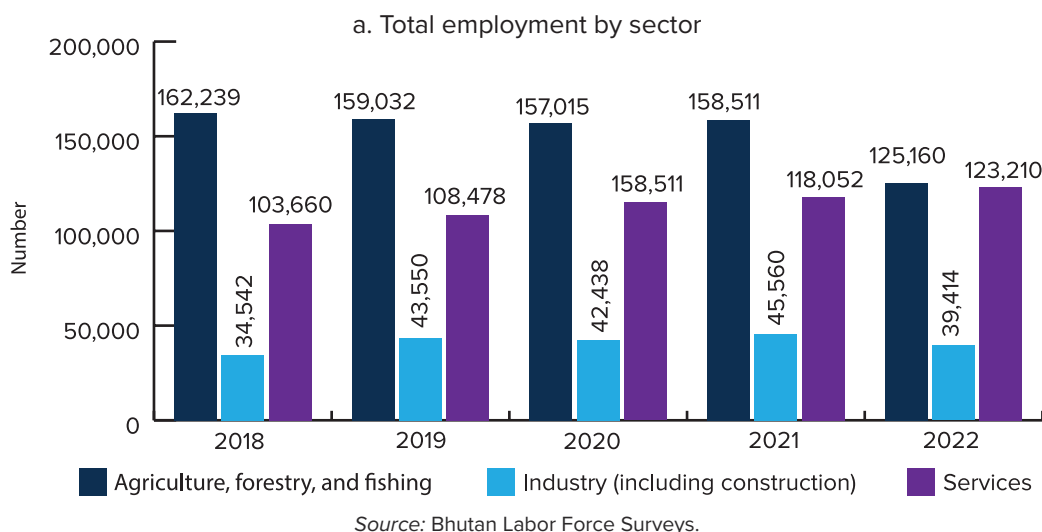
Group	Poverty (within group) component	Population (intergroup) component	Interaction (residual)
Urban	-0.00850	0.00323	-0.00131
Rural	-0.14878	-0.02008	0.01155
Main source of income:			
Wages and salaries	-0.02043	0.03772	-0.01242
Agricultural products	-0.08422	-0.06243	0.03535
Pottery/weaving	-0.00033	-0.00013	0.00003
Income from business	-0.00385	0.00273	-0.00143
Remittances	-0.00145	0.00347	-0.00153
Kidu/donations	-0.00031	0.00247	-0.00240
Pensions/scholarships	-0.00035	0.00046	-0.00036
Capital income	-0.00129	0.00151	-0.00130
Other	-0.02317	-0.05020	0.02227

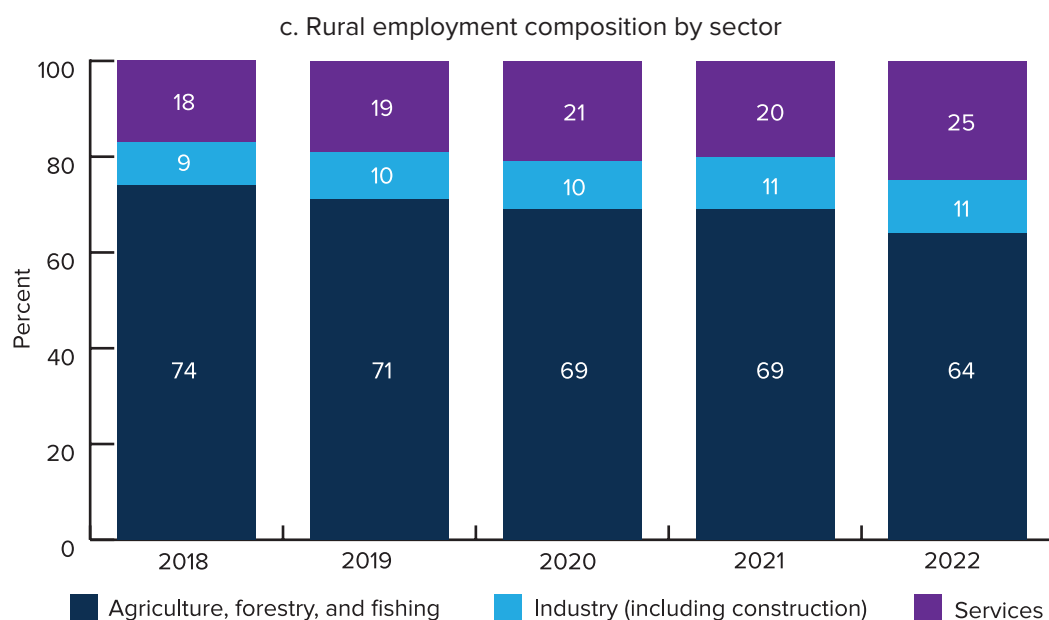
Source: Authors' calculations.

Both increases in agricultural productivity and employment in the higher value-added service sector contributed to the observed improvements in household living standards in rural areas. While the BLSSs lack information on labor income, the LFSs report that between 2018 and 2022 employment in agriculture steadily declined, while employment in the service sector increased (Figure 25, panel a).¹⁰ Value added per worker in the agriculture sector grew by over 17 percent between 2017 and 2022, albeit from low levels (Figure 25, panel b). At the same time, the percentage of rural workers employed in agriculture fell from 74 percent to 64 percent, while the percentage of workers in services grew from 18 percent to 25 percent and the percentage of rural workforce employed in industry increased modestly from 9 percent to 11 percent (Figure 25, panel c). Both the shift into higher value-added sectors and improvements in agriculture productivity of workers that remained in the sector led to improvements in household living standards and reductions in poverty in rural areas.

¹⁰ Information from the LFS was not available for 2017.

Figure 25. Increases in value added per worker in the agricultural sector and a shift into higher value-added sectors contributed to poverty reduction in rural areas in Bhutan





Source: Bhutan Labor Force Surveys.

Despite recent gains, agricultural productivity in Bhutan is below its potential.

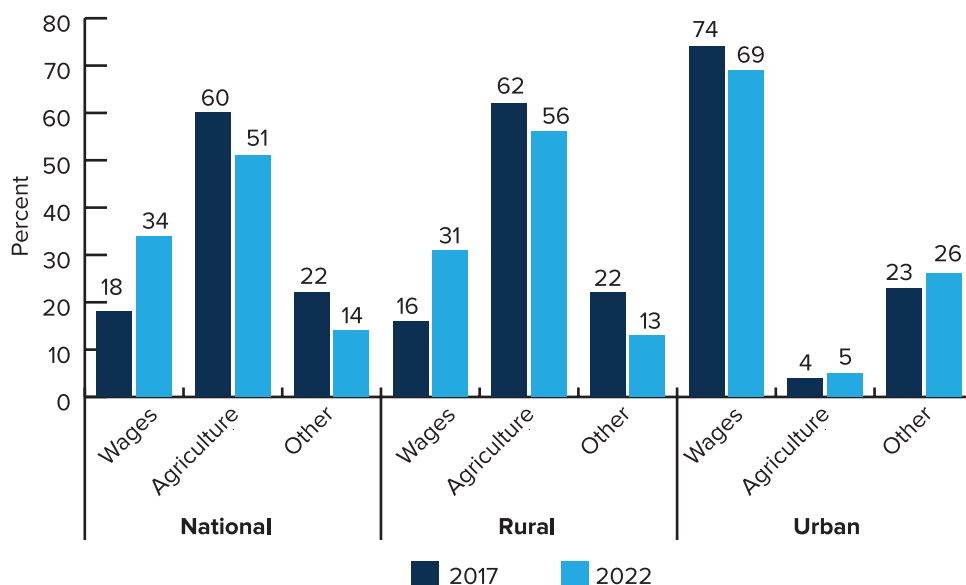
Between 1997 and 2019 productivity growth in agriculture was significantly lower for Bhutan than for peer countries such as Cambodia, Paraguay, and Peru (see details in Bhutan CEM [World Bank 2024c]). Closing agricultural productivity gaps will accelerate structural transformation and sustain gains in poverty reduction. Productivity gaps can be closed by alleviating production constraints: challenges related to water supply are frequently reported by farmers (problems with irrigation are consistently the most often reported across all crop-producing villages);¹¹ human-wildlife interactions also result in production constraints; labor shortages are another constraint reported by farmers; crop damages cause by far the largest impact on yields for paddy and maize (World Bank 2024c).

¹¹ As documented in the Bhutan CEM (2024), inadequate water supply reduces crop yields by 4 to 11 percent, demonstrating that water supply is a critical constraint to agricultural productivity and is likely to be exacerbated by climate change.

Although households' reliance on agricultural products as a primary income source decreased modestly between 2017 and 2022, the majority of poor households in rural areas still rely on agricultural incomes and likely benefited from productivity gains in the agricultural sector. Nationally, between 2017 and 2022, the share of poor households relying on agriculture as their primary income source decreased from 60 percent to 51 percent. In 2022, 56 percent of poor households in rural areas still relied on agriculture as their primary income source, down from 62 percent in 2017 (Figure 26, panel a). The positive trends in agricultural productivity likely improved the household welfare of those relying on agricultural income, as the poverty rate among households that reported agricultural products as their main source of income fell by 23.7 percentage points between 2017 and 2022 (Figure 26, panel b). Poverty reduction was the highest among households relying on income from agricultural products, relief programs such as Kidu and donations, other income sources, and remittances, followed by pensions and scholarships, capital income, wages and salaries, business income, and pottery and weaving. While relief programs, such as Kidu and donations, exhibited the largest poverty reduction, less than 1 percent of households reported relying on this as a primary income source. Thus, these programs likely served as supplemental income to other primary sources of income.

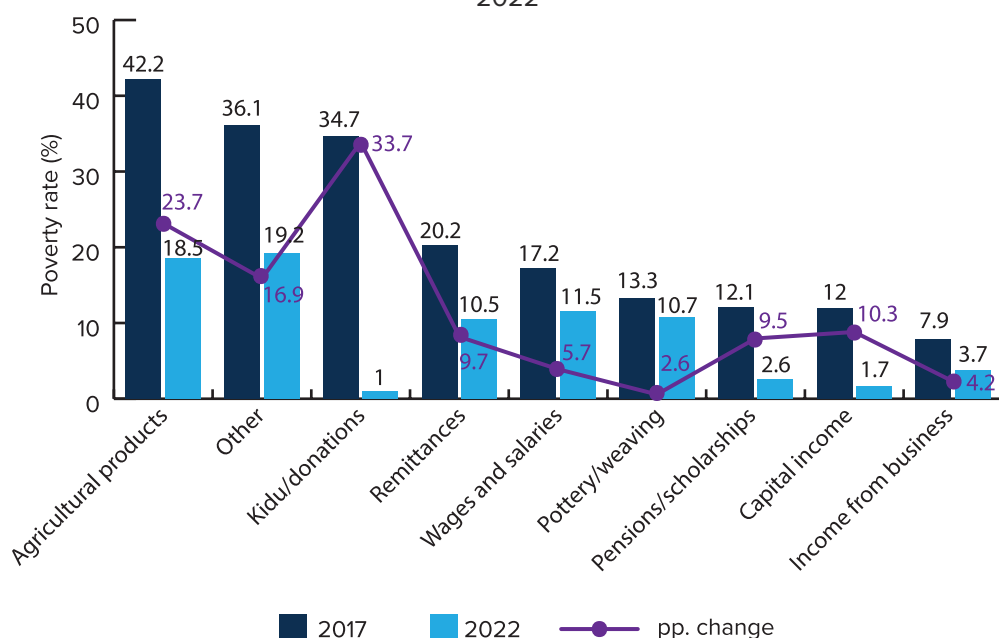
Figure 26. The majority of poor households still rely on agriculture as their primary source of income, and poverty rates fell rapidly for households relying on agricultural income

a. Primary income source among poor households by area and year



Source: Authors' calculations.

b. Poverty rate by main source of income and percentage point change between 2017 and 2022



Source: Authors' calculations.

Urbanization may have compounded these effects. The decrease in agricultural employment may have led to a migration from rural to urban areas, which contributed to the increase in welfare for rural families and, conversely, may have gotten in the way of welfare gains for urban families, without a compensating productivity increase in the manufacturing and service sectors. Since 2010, the urban population has steadily increased as the rural population has declined in Bhutan (Table 6).

Table 6. Urban and rural population, Bhutan 2010–2022

Year	Urban population	Rural population	Percent rural
2010	245,470	460,046	65.2
2011	253,839	459,492	64.4
2012	262,288	458,857	63.6
2013	270,775	458,114	62.9
2014	279,212	457,145	62.1
2015	287,484	455,790	61.3
2016	295,616	454,145	60.6
2017	303,711	452,410	59.8
2018	311,659	450,437	59.1
2019	319,355	448,104	58.4
2020	326,894	445,612	57.7
2021	334,381	443,105	57.0
2022	341,823	440,632	56.3

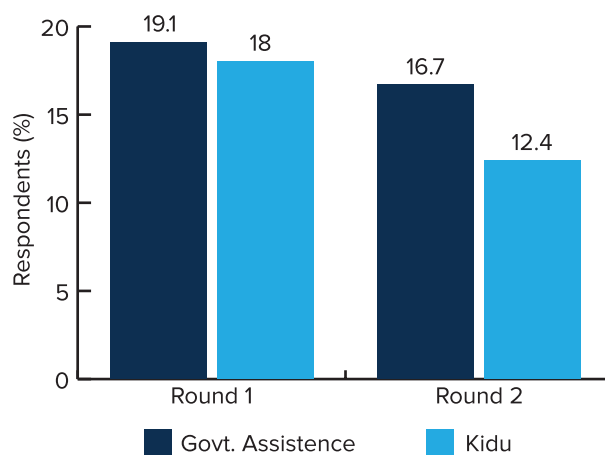
Source: World Bank WDI.

Rapid growth in both government assistance and remittances during the COVID-19 pandemic appear to have played an important role in poverty reduction.

Government assistance during the pandemic rose to reach nearly 20 percent of households, up from 5 percent before the pandemic, and likely provided vital supplemental income to those most vulnerable to labor market shocks, contributing to poverty reduction. Pandemic-related restrictions and the August 2020 national lockdown had a major impact on Bhutanese livelihoods, particularly on food security and earnings. The Druk Gyalpo's Relief Kidu was the most important form of government assistance during the pandemic. Recipients of government assistance and Kidu increased rapidly in 2020 and 2021 to nearly 20 percent of the population (Figure 27). Kidu reached over 50 percent of individuals who were not employed or absent from the labor market, while 22.7 percent of the self-employed received Kidu assistance. Kidu assistance covered the majority of rural households (63.9 percent). Nearly 30 percent of individuals receiving Kidu reported suffering from a severe COVID shock (Table 7). These COVID-19 pandemic-related relief programs likely supported the incomes of the most vulnerable at the lower end of the consumption expenditure distribution, contributing to the observed consumption growth and poverty reduction between 2017 and 2022.

Figure 27. Government assistance and relief programs grew rapidly during the COVID-19 pandemic and appeared to be relatively well-targeted

Recipients of assistance Sep–Oct 2020 (round 1) and Sep–Oct 2021 (round 2)



Source: Authors' calculations.

Table 7. Share of Kidu recipients by groups

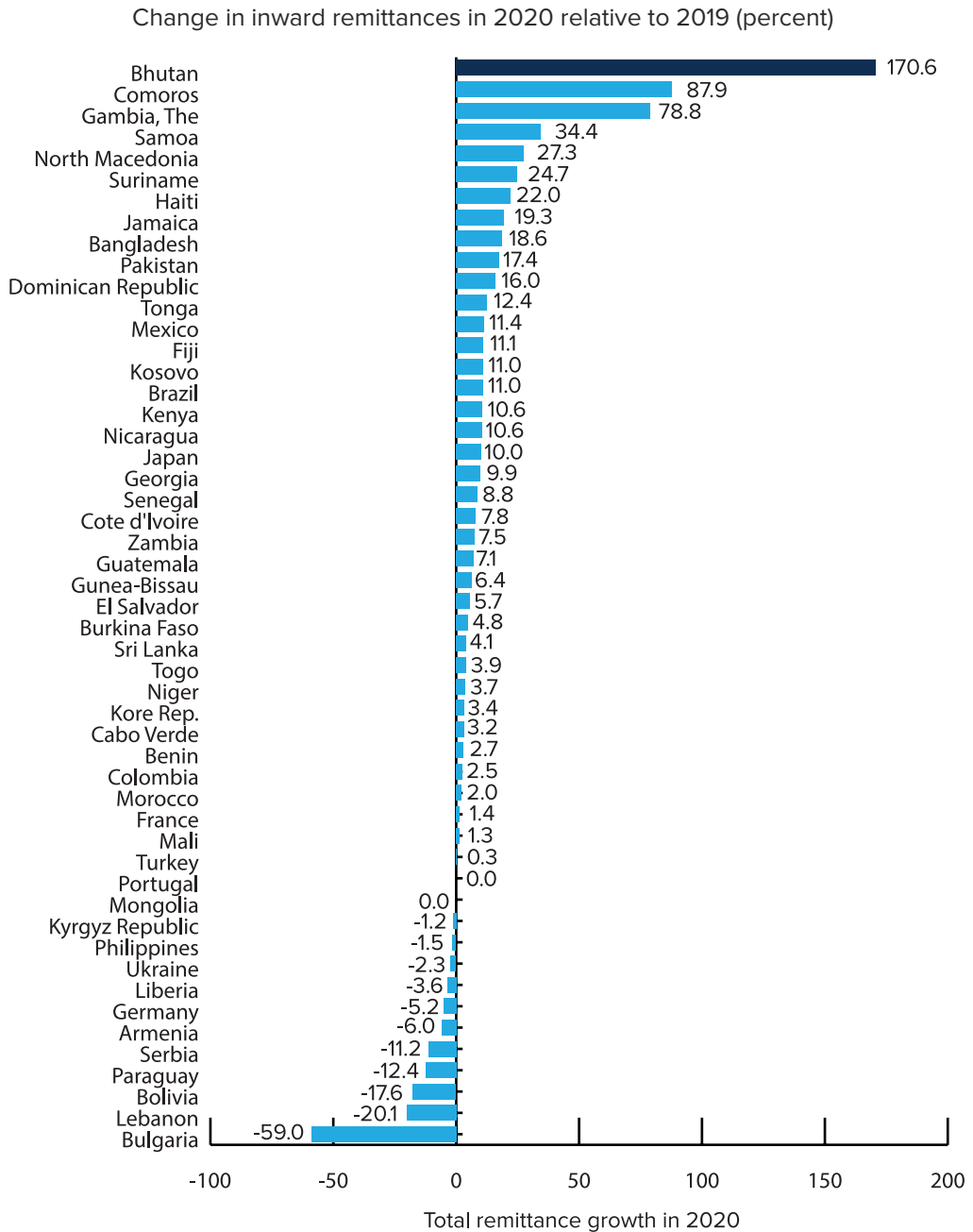
Share of Kidu recipients (%)	2020		2021	
	18.0		12.4	
	Share of Group ^a (%)	Share of Kidu Recipients ^b (%)	Share of Group ^a (%)	Share of Kidu Recipients ^b (%)
Job Type:				
Public	14.8	13.0	15.6	3.9
Private	8.0	29.2	13.4	18.3
Laborer	2.5	6.9	4.7	7.6
Self-employed	22.7	16.1	15.8	16.2
Not employed/absent	52.0	19.1	50.6	12.7
Total	100.0		100.0	
Sector:				
Agriculture	16.6	7.8	11.8	9.5
Manufacturing	5.2	16.9	5.7	11.6
Services	26.2	22.5	31.8	13.2
Not employed/absent	52.0	19.1	50.6	12.7
Total	100.0		100.0	

Share of Kidu recipients (%)	2020		2021	
	18.0		12.4	
Urban/rural:				
Urban	36.1	22.7	38.5	15.7
Rural	63.9	15.3	61.5	10.3
Severe Covid shock ^c :				
Severe Covid shock	16.4	28.6		
Severe shock not identified	83.6	15.9		
Notes:				
^a The ‘share of group’ indicates the share of individuals belonging to the group in total respondents.				
^b The ‘share of kidu recipients’ shows the share of individuals who received kidu within the group.				
^c Respondents either ‘stop working’, ‘not seeking a job’, or ‘decreased operations’ specifically because of Covid-19 were defined as those severely affected.				

Source: Authors' calculations.

During the pandemic, Bhutan also saw a massive increase in remittances, which contributed to poverty reduction. Between 2019 and 2020, Bhutan experienced a 170.6 percent increase in inward remittances—among the highest in the world during this time (Kpodar et al. 2023) (Figure 28). The almost threefold increase in remittances is believed to be partly driven by Bhutanese migrants returning home with their savings. Remittances from Bhutanese workers abroad were crucial to improvements in welfare among recipient households, increasing their total income and reducing poverty significantly. Without remittances, the poverty rate would be substantially higher, and an estimated 24,000 more people would be classified as poor. While remittance growth likely contributed to poverty reduction, it remains to be seen whether positive trends in remittances remain sustainable.

Figure 28. Remittance growth in Bhutan was among the fastest in the world during the COVID-19 pandemic



Source: Kpodar et al. 2023.

Note: For some countries, the figures reported reflect the year-on-year growth in remittances for the last month available in 2020.

Remittances and social programs contribute to higher levels of consumption among the poor. Statistical evidence shows that households that received remittances reported 5 percent higher consumption expenditure per capita than households that did not receive remittances (Table 8). While Relief Kidu was not statistically significantly related to higher consumption expenditure on its own, the program, which provided monthly income and loan interest payment support, was associated with a 20 percent higher consumption expenditure among households in the first expenditure quartile.

Table 8. Remittances and relief program support are associated with higher consumption expenditure among poor households

	All	I quartile	II quartile	III quartile	IV quartile
Relief Kidu Received	-0.039 (0.030)	-0.116 (0.076)	-0.003 (0.054)	-0.017 (0.046)	-0.041 (0.072)
Remittances Received	0.056 *** (0.014)	0.064 ** (0.025)	0.086 *** (0.025)	0.082 *** (0.030)	-0.000 (0.040)
Have a loan Yes	-0.020 ** (0.008)	0.009 (0.018)	-0.019 (0.016)	-0.005 (0.015)	-0.036 ** (0.018)
Relief Kidu # Have a loan Received # Yes	-0.060 (0.046)	0.204 * (0.120)	0.025 (0.081)	0.003 (0.072)	0.059 (0.109)
Remittances # Have a loan Received # Yes	-0.004 (0.026)	0.048 (0.050)	-0.037 (0.050)	-0.123 ** (0.048)	0.053 (0.063)
*p < 0.10, ** p < 0.05, *** p < 0.01					

Source: Authors' calculations.

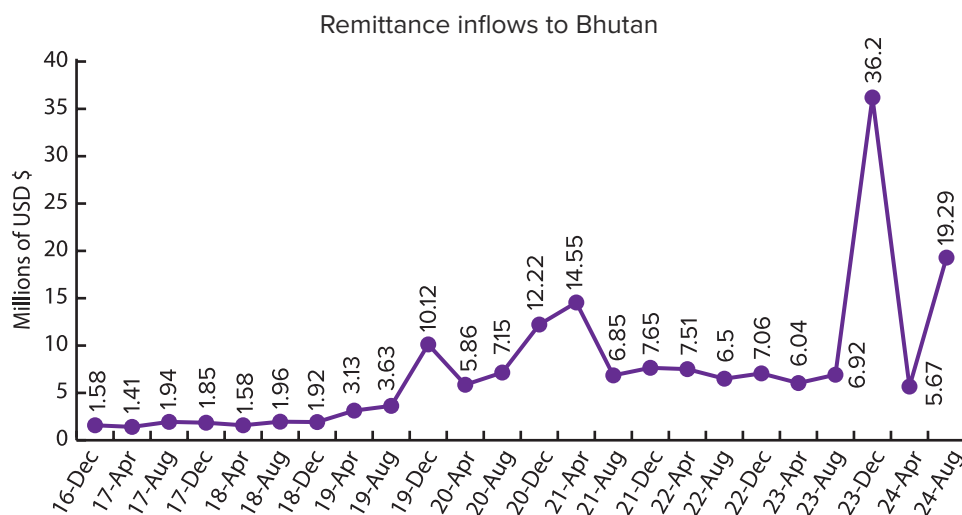
Remittances and economic (income source) diversification appear to be key drivers of variations in poverty reduction across districts. Looking at the district of Dagana, which achieved the most significant poverty reduction, and the district of Haa, where poverty levels slightly increased, two different stories of poverty reduction emerge. Dagana shows the highest reduction in the poverty rate between 2017 and 2022, falling from 69.4 percent to 8.1 percent due to a large increase in remittances and income source diversification. In 2022, over a quarter (26.8 percent) of households in Dagana reported receiving remittances, and 9.5 percent relied on remittances as their main income source, compared to less than 1 percent in 2017. Further, many households in Dagana shifted from wage-based income to non-agricultural, non-wage sources. The proportion of households with non-agricultural, non-wage income nearly doubled in Dagana (increasing by 87 percent, from 12.9 percent to 24.1 percent), whereas it slightly decreased in other districts by an average of 6 percent. This was

accompanied by a slight decrease in the share of households reliant on agriculture in Dagana, whereas other districts saw an increase. Specifically, the percentage of agriculture-dependent households in Dagana decreased by 5 percent, from 52.0 percent to 49.6 percent, compared to an 8 percent increase in other districts (from 32.8 percent to 35.3 percent). However, within agriculture, there was a shift toward more profitable products such as meats, dairy, and eggs, while cereal production declined significantly. Additionally, new income sources emerged in Dagana by 2022, such as non-wood forest products, weaving, real estate, and pensions, which were nonexistent in 2017. Conversely, in the district of Haa, remittances were limited, and earnings from non-agricultural, non-wage activities declined over the period and were notably lower in 2022—approximately 4.5 times less than the average in other districts (US\$38,297 versus US\$172,377). The trend in lower non-agricultural, non-wage activities was accompanied by a slight shift toward agricultural activities, particularly fruit cultivation, which did not make up for the shortfall in lower incomes from other activities, leading to slight poverty increases. In sum, these results highlight the importance of economic diversification for poverty reduction, echoing one of the key messages of Bhutan CEM (2024c) that economic diversification is crucial to increase resilience and generate more and higher-quality jobs within the economy.

The risk of a post-pandemic slowdown in remittance growth and social spending may challenge future poverty reduction progress.

Post-pandemic remittance inflows to Bhutan have remained high, but volatile. The level of remittance inflows has remained well above pre-pandemic levels, reaching a peak of over US\$35 million in December 2023 (Figure 29). These flows are likely under-recorded due to the widespread use of informal channels and the true size of remittances is expected to be orders of magnitude larger than the level reported. The dependence on remittances is increasing with outward migration from Bhutan. However, remittance inflows have been volatile and may be risky to rely on.

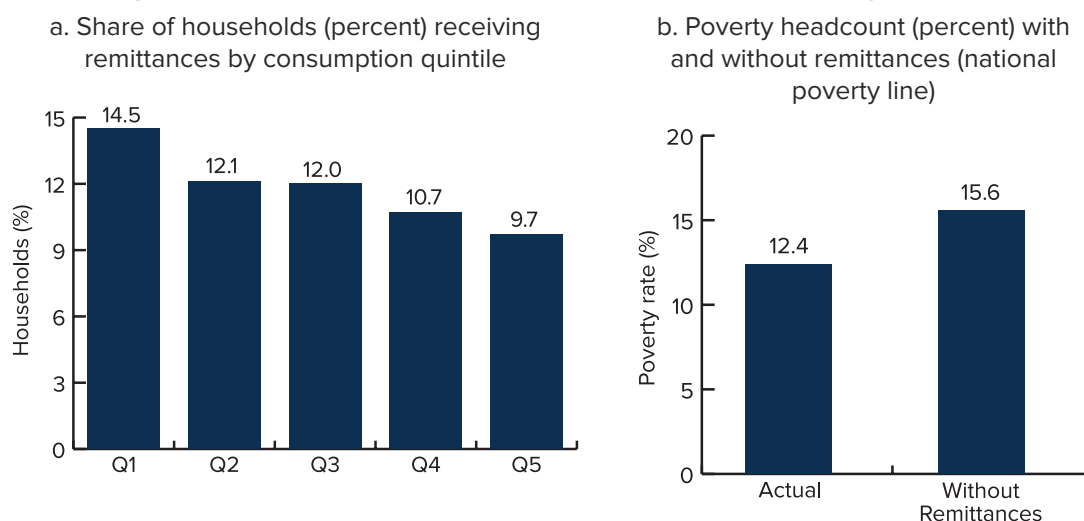
Figure 29. Post-pandemic remittance inflows remain high, but volatile



Source: Ministry of Finance, Bhutan.

Potential reversals in remittance growth risk increasing poverty, as a large share of the poorest Bhutanese households rely on remittances. The share of households receiving remittances is the highest among the poorest end of the consumption distribution. For example, in 2022, 14.5 percent of households in the lower consumption quintile received remittances compared to 9.7 percent of households in the richest consumption quintile (Figure 30, panel a). If households cannot rely on remittances, the national poverty rate is estimated to increase to 15.6 percent from 12.4 percent. This would increase the number of people in poverty by over 25 percent (Figure 30, panel b). While reliance on remittances (from emigration) is central to reducing poverty, structural vulnerability to falling back into poverty remains high due to a weak domestic labor market.

Figure 30. Remittances are an important source of income among the poor



Source: Authors' calculations.

Analysis of poverty dynamics between 2017 and 2022 supports the significant progress made, highlighting the critical role of education in rural areas toward poverty reduction in Bhutan.

Results from analysis of poverty dynamics in Bhutan using synthetic panels support the poverty reduction narrative, with upward poverty mobility (the probability of escaping poverty between 2017 and 2022) 20 times higher than downward poverty mobility. The analysis examines the dynamics of poverty in Bhutan between 2017 and 2022, utilizing cross-sectional data from the BLSSs. It employs a methodology proposed by Dang and Lanjouw (2023) to construct synthetic panels and estimate poverty transition probabilities. Three main findings emerge from the analysis. First, poverty turnover in Bhutan is low overall (that is, not many people, as a share of the population, moved in and out of poverty during that period). Second, chronic poverty, defined as the probability of remaining poor in both years, is also low, both in absolute terms and compared to other countries for which we have similar estimates: the probability of being poor in both years is 6 percent of households in Bhutan, compared to 15 percent in India and 17.5 percent in Pakistan. Third, upward poverty mobility (the probability of escaping poverty between 2017 and 2022) is 20 times higher than downward poverty mobility: 68.8 percent and 3.7 percent, respectively.

The profiling of population groups provides deeper insights into the factors influencing these dynamics, with education and rural residence emerging as significant determinants of mobility. Households with lower education levels were found to have higher rates of both upward and downward mobility, suggesting a greater susceptibility to economic fluctuations. Conversely, rural residence was positively associated with upward mobility and negatively associated with downward mobility, underscoring the benefits accrued by rural populations during the period under study. This nuanced understanding of poverty dynamics in Bhutan has important implications for policy. The results suggest that while the country has made substantial progress in reducing poverty, efforts need to be targeted toward sustaining the gains made by rural households and addressing the vulnerabilities faced by low-education households. Additionally, the findings highlight the importance of policies that support education and skill development to enhance social mobility and economic stability.



PART II

Toward Further Gains in Poverty Reduction and Equity: Key Challenges that Need to be Addressed



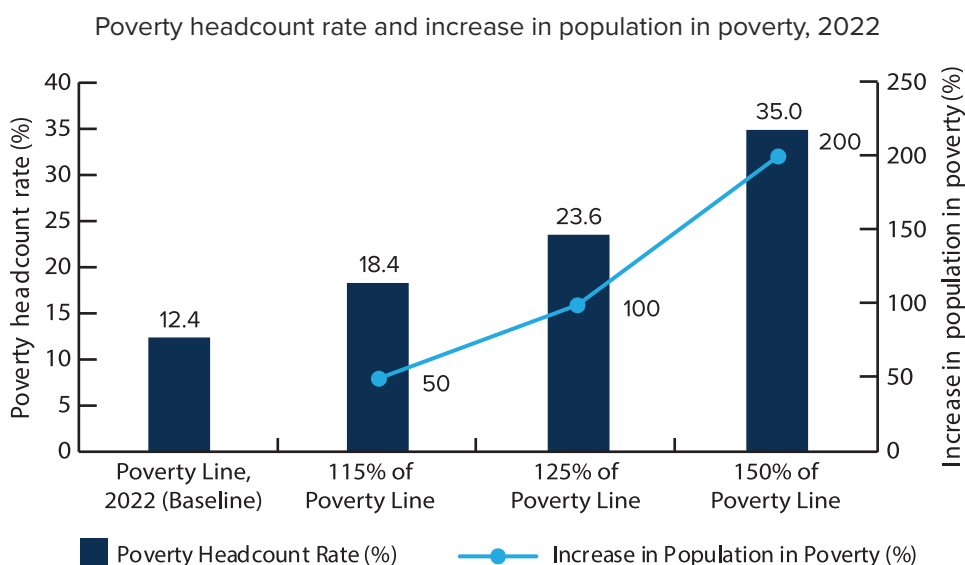
CHAPTER 3

Addressing Vulnerability to Climate Shocks and Improving Resilience

Significant progress on poverty reduction has been made, but vulnerabilities persist.

Many households remain vulnerable and just a small shock away from falling into poverty. If the poverty line in 2022 had been just 15 percent higher, the national poverty rate would have increased by 6 percentage points, and the population living in poverty would have increased by 50 percent (Figure 31). Likewise, a 25 percent increase and a 50 percent increase in the poverty line would double and triple the population in poverty, respectively. To put this in perspective, had the poverty line in 2022 been Nu 2,893 per person per month higher (about US\$140 PPP), the poverty rate would have been 35 percent, higher than the observed 2017 poverty rate of 28 percent. This shows that the consumption expenditure of a large number of households is near poverty levels, and shocks to resources may put households at risk of falling into poverty or further impoverishment.

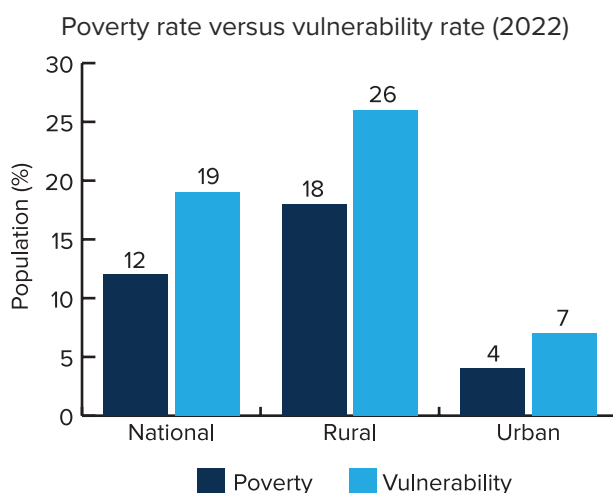
Figure 31. Small changes in the poverty line lead to large changes in the poverty headcount rate in Bhutan



Source: Authors' calculations.

In 2022, vulnerability to poverty in Bhutan was estimated at 19 percent of the population (that is, nearly 150,000 people), 7 percentage points higher than the poverty rate (Figure 32). A 2022 vulnerability to poverty study shows that there is a large vulnerable population at high risk of poverty or further impoverishment in Bhutan. Like poverty, vulnerability is much higher in rural areas at 26 percent of the rural population compared to 7 percent of the urban population. Vulnerability considers the variance in households' consumption to estimate future vulnerability to poverty because poverty status measured from one survey in a given year is only a snapshot of the population at the time of the survey. In this regard, vulnerability analysis can capture both risk-induced vulnerability (idiosyncratic and covariate shocks) and poverty-induced vulnerability (the chronically poor).

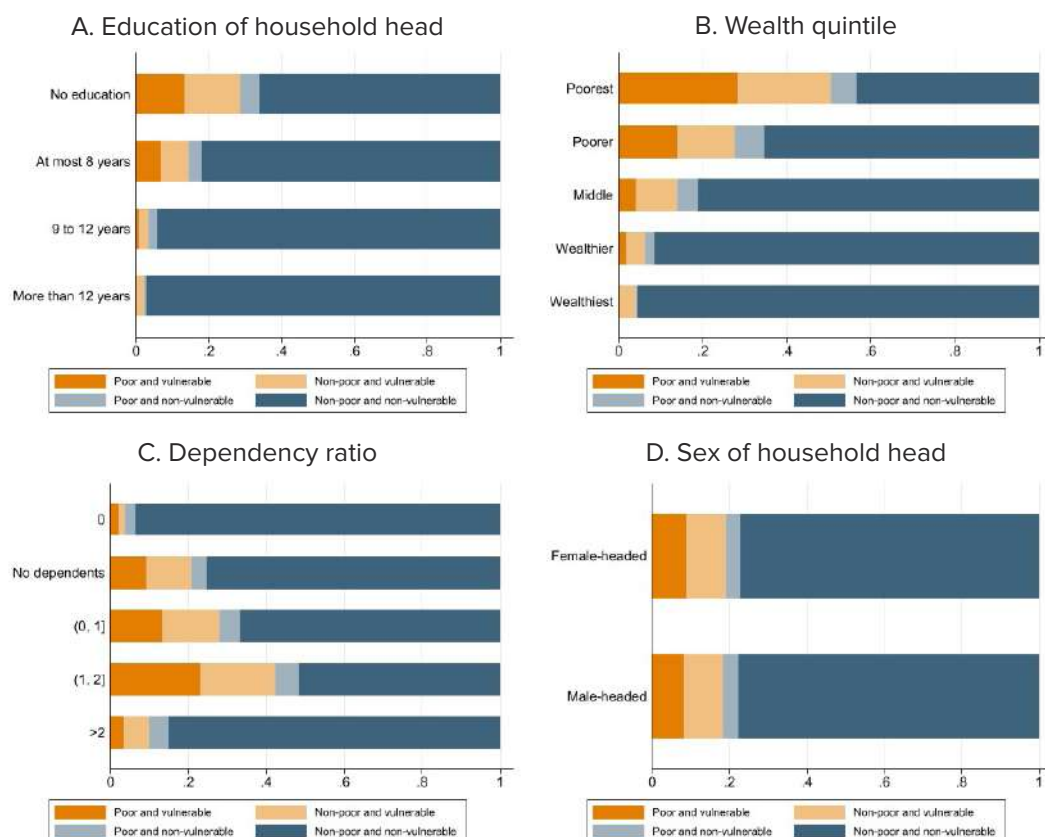
Figure 32. Vulnerability is higher than poverty, particularly in rural areas



Source: Authors' calculations.

Profiles of the vulnerable reiterate the importance of education in reducing vulnerability and poverty. The characteristics of the population who are vulnerable to poverty are similar to those who are in poverty (Figure 33). Education appears to be important as vulnerability and poverty rates decline significantly for household heads with over eight years of schooling. Similarly, households with more assets and wealth, as measured by the wealth index, and less dependents per working-age adult, as measured by dependency ratios, are less vulnerable and less likely to be in poverty. The sex of the household head does not appear to be an important variable for vulnerability and poverty in Bhutan.

Figure 33. Profiles of the vulnerable highlight characteristics associated with vulnerability and poverty



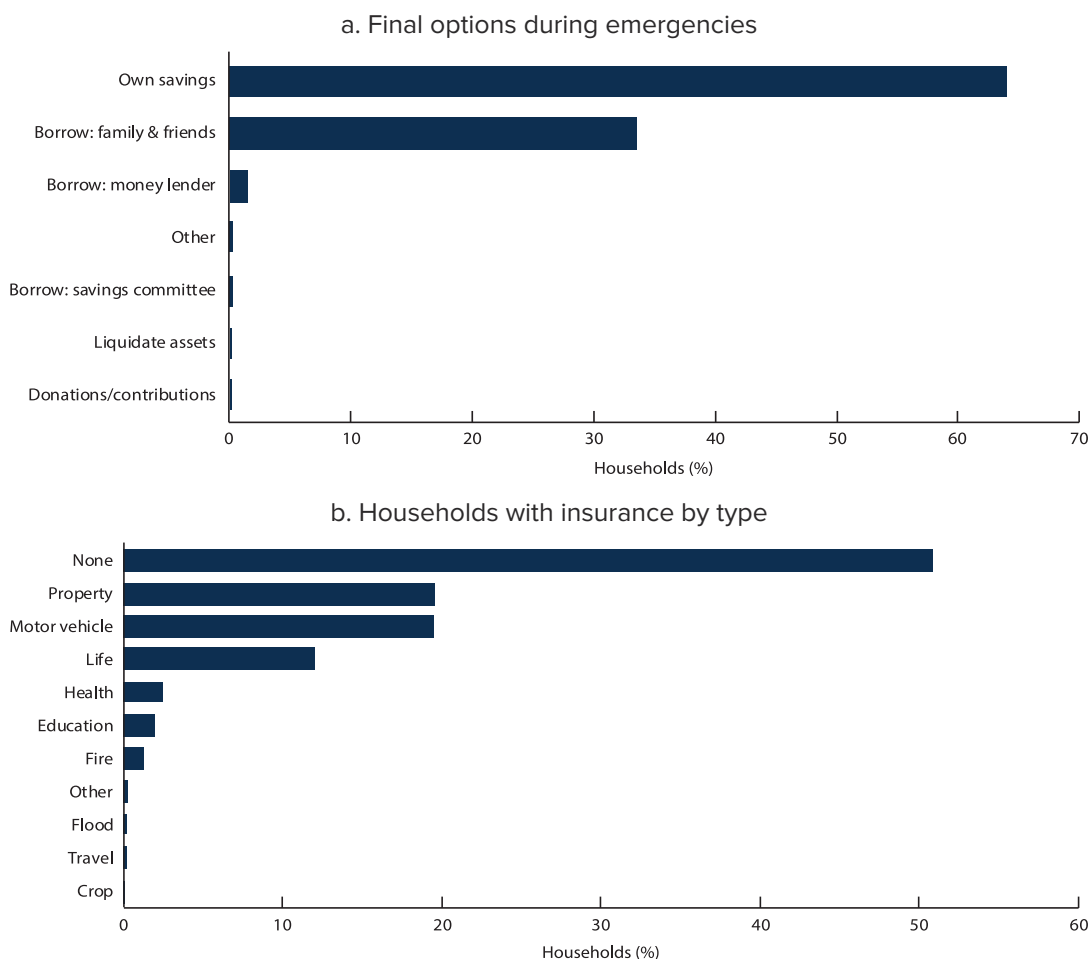
Source: Authors' calculations.

While most Bhutanese households rely on savings to counter the effects of emergencies, poor households have the least resources to recover from a shock and often rely on family or friends—a risky strategy in the event of a community-wide shock. Insurance coverage is limited in Bhutan, with over 50 percent of households holding no insurance at all and the limited amount of insurance covering primarily property and motor vehicles (approximately 20 percent each) and, to a lesser extent, life (approximately 10 percent) and health insurance¹² (less than 5 percent) (Figure 34, panel b). Without insurance, households tend to rely on their own savings and family and friends in the case of an emergency (Figure 34, panel a). Poor households, especially in rural areas, are less likely to have a bank account, which may be partly attributed to a lack of access to banking facilities (Figure 34, panel c). For example,

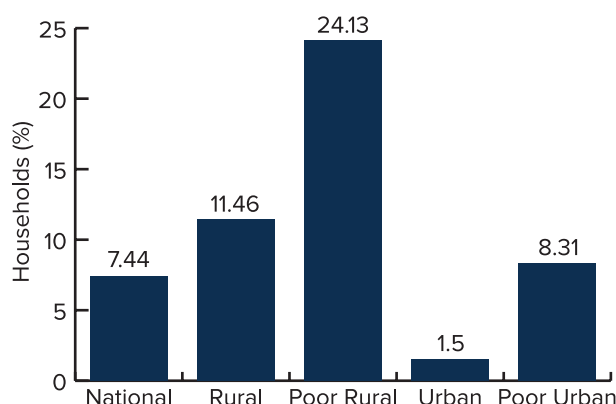
¹² Health care is free in Bhutan and, therefore, the low coverage of health insurance is expected.

only 25 percent of the rural poor live within an hour from a bank, while 60 percent of the rural, non-poor are within an hour from a bank. Lacking savings, the rural poor often depend on family and friends in an emergency, which can be risky in the event of covariate, community-wide shocks (Figure 34, panel d).

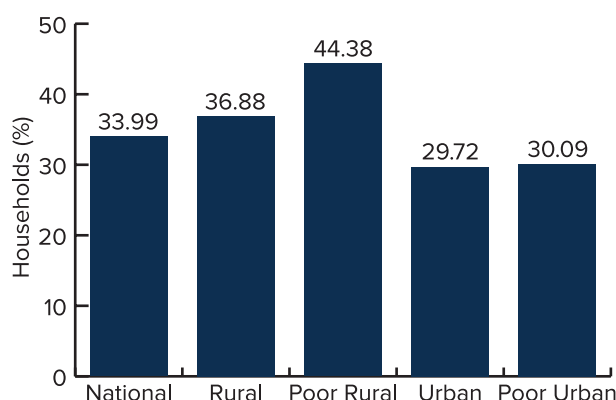
Figure 34. The poor and vulnerable lack coping mechanisms in case of emergencies



c. Households with no access to bank account



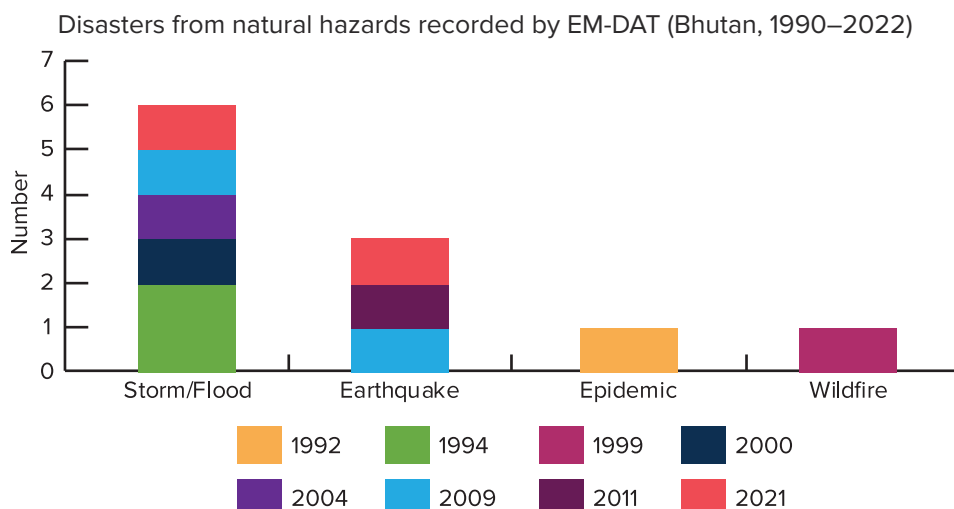
d. Households that rely on family or friends in case of emergency



Source: Authors' calculations.

The country's unique topology, weather patterns, and high reliance on agriculture make it particularly vulnerable to climate shocks, especially in the face of climate change.

Bhutan is especially vulnerable to climate shocks due to the country's mountainous terrain, weather patterns, and high reliance on agriculture. Most of the country's infrastructure and agricultural land is located along drainage basins that are highly vulnerable to heavy monsoon rains and glacial-lake outbursts. Historically, according to international disaster databases, storms and floods have been the most commonly recorded significant events to affect Bhutan, followed by earthquakes (EM-DAT 2024) (Figure 35).

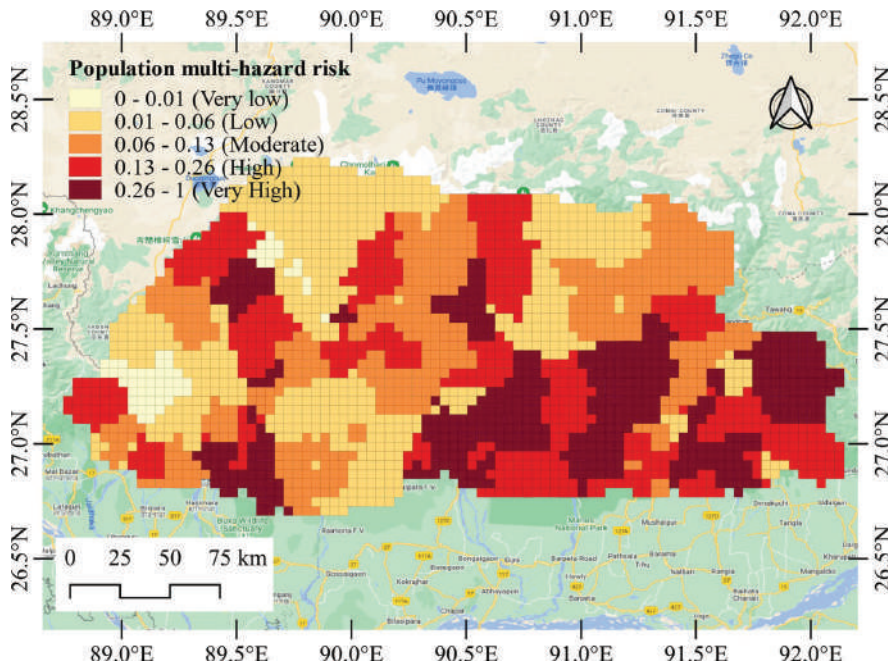
Figure 35. Historically, storms and floods have been the most frequent recorded hazards

Climate change is increasing extreme weather events and contributing to changing temperatures and rainfall patterns, drying streams, and flash floods, further increasing risks to infrastructure and lives. Climate change in Bhutan is increasing the formation of supraglacial lakes due to the accelerated retreat of glaciers with increasing temperatures (National Center for Hydrology and Meteorology, 2019). The impact of only flooding on human health and livelihoods is expected to grow and could be up to 4 percent of the country's GDP by the 2030s (World Bank 2021).

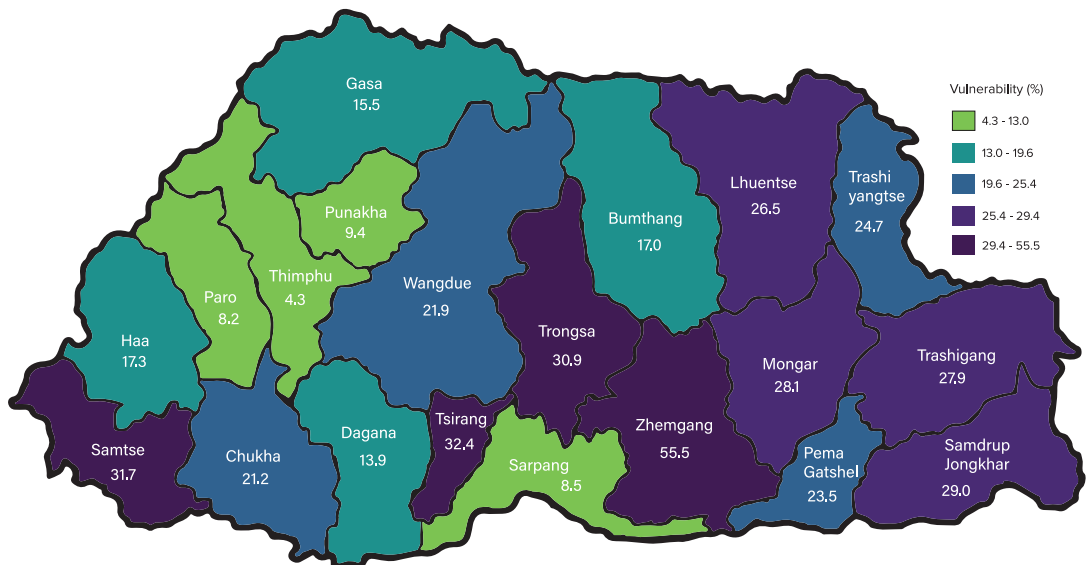
Combining maps of vulnerability to poverty and hazard risk exposure shows there is a strong geographic relationship between vulnerability to poverty and hazard risk exposure concentrated in the central southeast and southwestern portion of the country. Tempa and Yuden (2023) derive a population-weighted exposure to multi-risk hazards across the 205 blocks (Gewogs) of Bhutan (Figure 36, panel a). The southwestern half of the country tends to be more exposed to hazards, with the highest rates of hazard risk and vulnerability concentrated toward the southcentral part of the country (Figure 36, panel b). Zhemgang stands out as a place where both vulnerability to poverty and hazard risk exposure are among the highest in the country.

Figure 36. Large heterogeneity in vulnerability to poverty and risk to hazards exists across districts

a. Multi-risk hazard map



b. Map of vulnerability to poverty



Source: a. Tempa and Yuden 2023; b. Authors' calculations.

A large portion of the population of Bhutan is exposed to risk of landslide, heatwave, drought, flood, and earthquake, which risks pushing vulnerable households into poverty or further impoverishment. Hazard data available for drought, flood (fluvial and pluvial), heatwaves, landslides, and earthquake combined with grided population data from the Global Human Settlement Layer (Schiavina et al. 2023) and poverty maps were used to estimate that over 68 percent of the poor, 67 percent of the near poor,¹³ and 65 percent of the total population could be exposed to significant hazard risks (Table 9). For specific return periods and intensity thresholds, the poor are the most exposed to landslides, followed by heatwaves, droughts, and floods, nationally. These aggregate estimates can be used to gauge the scope of hazard risk exposure in Bhutan but may mask local differences in hazard risk profiles. Therefore, policy makers should work closely with local communities to assess hazard risk and resilience priorities.

Table 9. A larger share of the poor, near poor, and total population of Bhutan is exposed to climate risks

Population, number of poor, and number of near poor exposed to defined hazards in Bhutan

Event	Return period	Intensity threshold	Population exposed (Thousands)	Share of pop.	Poor exposed (Thousands)	Share of poor	Near poor exposed (Thousands)	Share of near poor
Drought	40	>30% land affected	73	10%	11	12%	28	11%
Flood	100	>0.5m	76	10%	6	6%	21	8%
Heat-wave	100	>30°C WBGT (3-day max.)	136	18%	18	19%	51	19%
Land-slide	100	Significant landslide	327	43%	46	47%	120	45%
Earth-quake	475	>0.401 PGA	40	5%	8	9%	19	7%
Any of the defined events			496	65%	67	68%	179	67%
None			267	35%	31	32%	87	33%

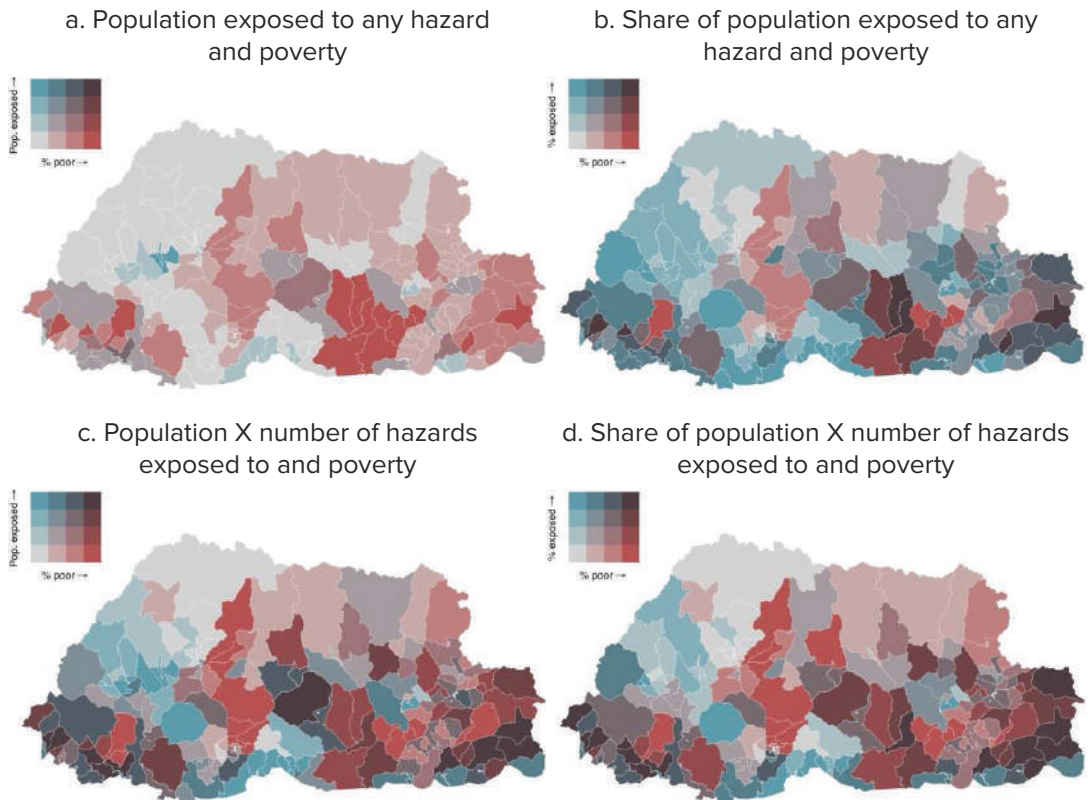
Note: Estimates of the number of poor (below nations poverty line) and near poor (below 1.5 x national poverty line) exposed are based on *Gewog*/town level estimates from the 2022 poverty map.

Source: Schiavina et al. 2023.

¹³ Defined as household with consumption expenditure above the poverty line, but consumption less than 1.5 times the poverty line.

The poor population estimated to be exposed to any hazard risk is concentrated in the southcentral part of the country near Zhemgang as well as the southeast and southwest of the country. Areas around Samtse in the southwest, the northern part of Zhemgang in the southcentral region, and Samdrup Jongkhar and Trashigang in the southwest stand out as having a high level of poverty and hazard exposure (Figure 37). This information should be considered in designing national and regional hazard mitigation and resiliency plans that reduce vulnerabilities and speed recovery following a disaster.

Figure 37. The poor are most exposed to any hazard risk in the southcentral part of the country



Source: Authors' calculations.

Developing social protection programs will play a vital role in continued vulnerability and poverty alleviation.

While social protection is growing in Bhutan, it has generally focused on ad hoc humanitarian and emergency schemes rather than continuous vulnerability and poverty alleviation. Bhutan, recognizing the importance of social protection in fostering the well-being and happiness of its citizens, earmarked developing a social protection policy for the country's 13th Five Year Plan that is to commence in 2025. This system seeks to increase investment in people across their life cycle to improve development, economic growth, and equity through a commitment to developing human capital in a sustainable manner and complementing the post-shock temporary emergency support programs offered through Kidu.

Increasing the budget for noncontributory social protection schemes, such as cash transfer programs, while additionally promoting contributory social protection schemes should be considered to protect and promote human capital, reduce vulnerabilities, and improve the productivity of small and subsistence farmers. Social protection programs will need to build on strong interoperable data systems focused on raising quality, synergies, and complementarity of services to better serve people. Identifying, preparing for, mitigating, and responding to climate shocks can promote economic stability and growth.

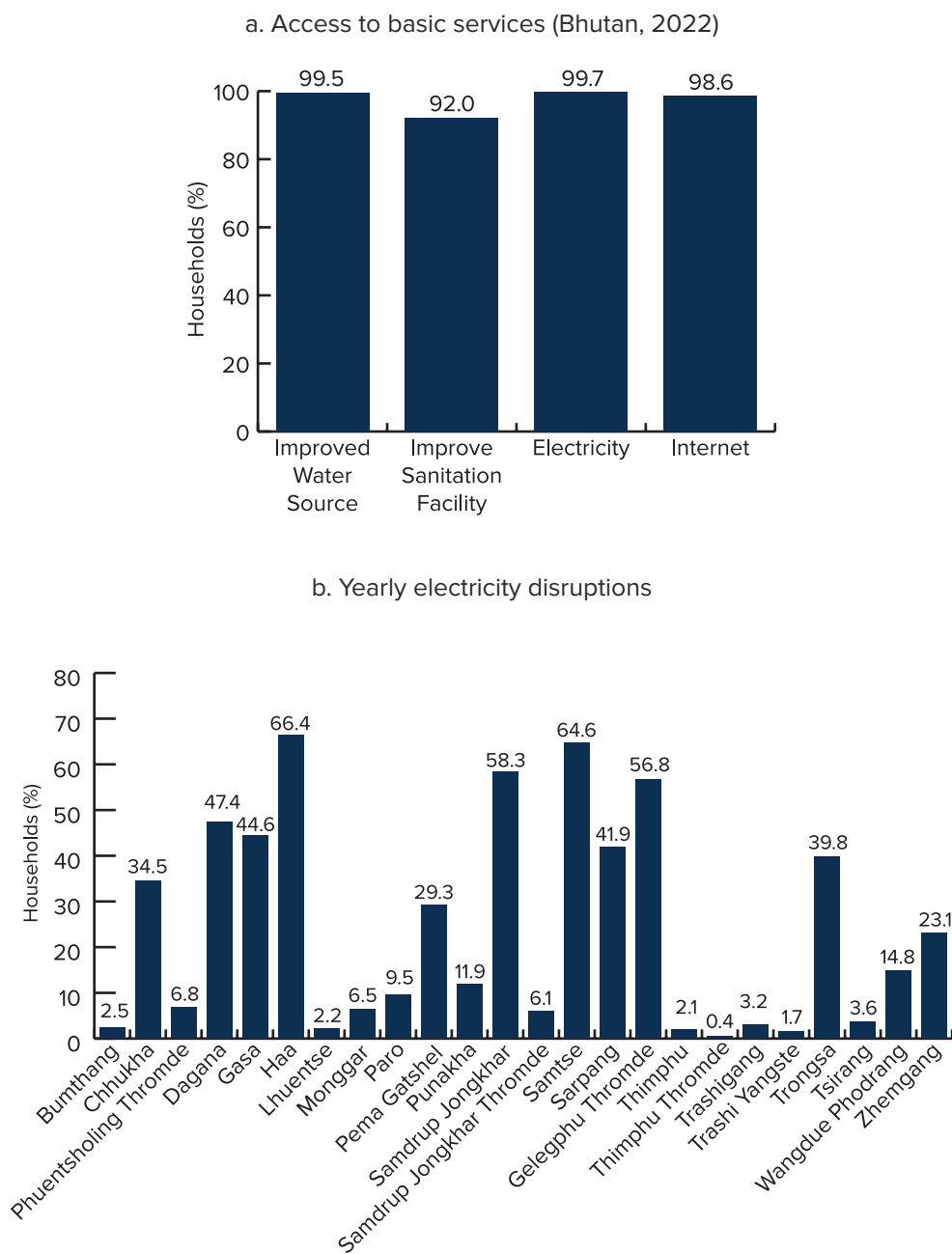
CHAPTER 4

Tackling Geographic Disparities in Service Delivery

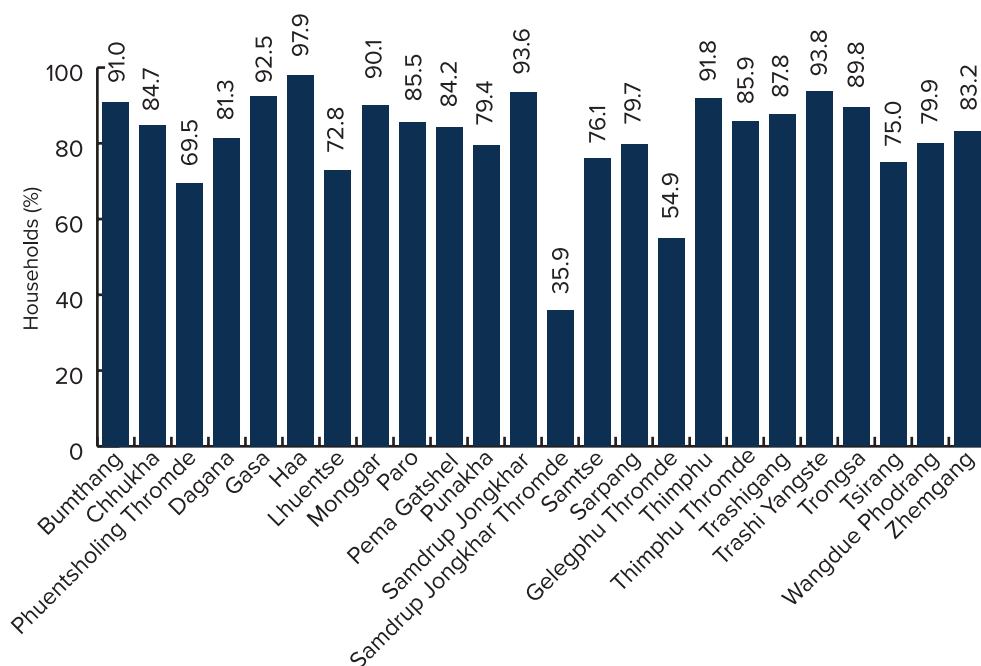
Despite near-universal access to basic services in Bhutan, large geographic disparities continue to persist, especially in terms of service quality and access to key facilities and infrastructure, with the rural poor being particularly isolated.

While access to basic services has reached nearly all households, large disparities persist in the quality of services across districts. In 2022, nearly all households in Bhutan had access to an improved water source, electricity, and internet, while 92 percent of households had access to an improved sanitation facility (Figure 38, panel a). However, despite near-universal access to basic services, the quality of services varies substantially across districts. For example, over 50 percent of households reported significant electricity disruptions in Haa, Samdrup Jongkhar, Samtse, and Gelephu Thromde (Figure 38, panel b). Access to a 24-hour drinking water supply varies from around 36 percent of households in Samdrup Jongkhar Thromde to 98 percent of households in Haa and most households treat water to make it safe to drink (Figure 38, panel c). Quality of internet access, which became increasingly important during pandemic lockdowns, varies across the country with 17 percent of the Trongsa hohouseholds and 54 percent of the Samdrup Jongkhar hohouseholds reporting access to only weak and unreliable internet (Figure 38, panel d).

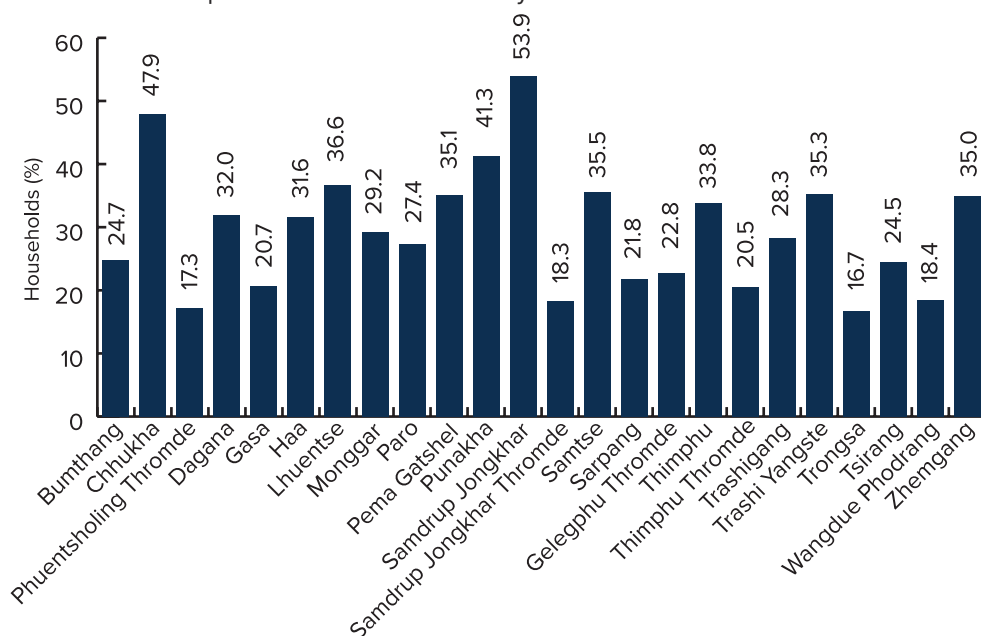
Figure 38. Large disparities persist in the quality of basic services across districts



c. Households with 24-hour drinking water supply (percent)



d. Population with access to only unreliable or weak internet

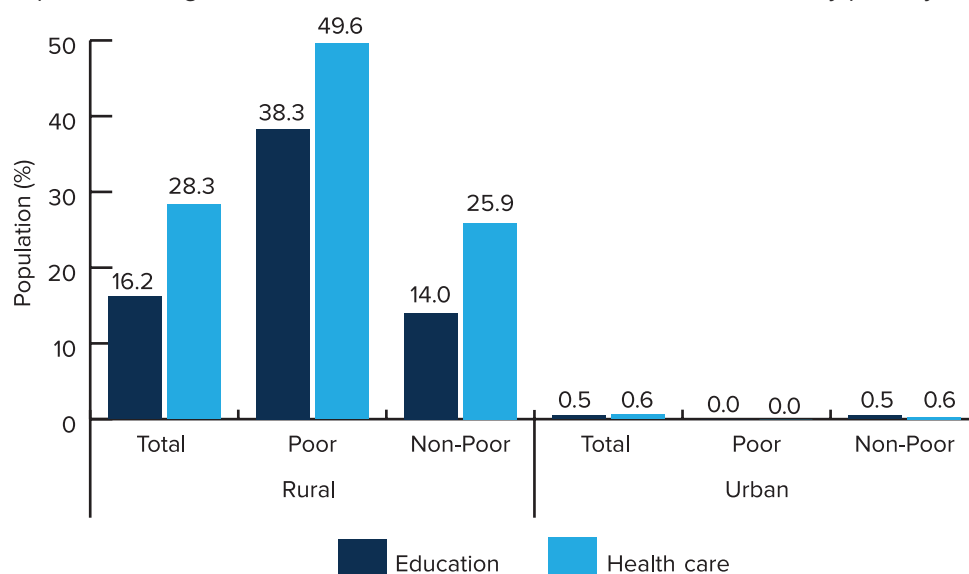


Source: Authors' calculations.

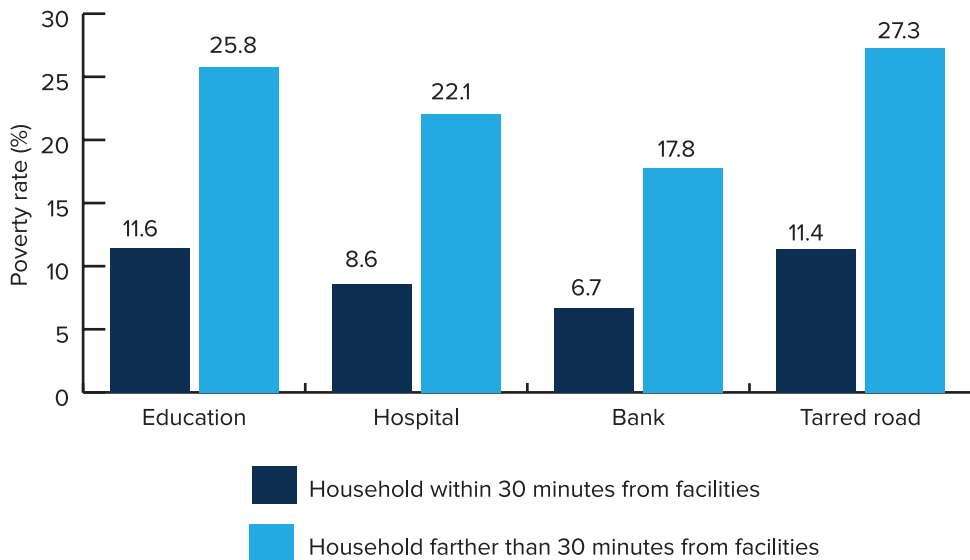
The rural poor are more isolated from important health care and educational facilities, as well as financial institutions and logistics infrastructure, than the rural non-poor and, thus, bear a larger burden of indirect costs to access vital services and markets. While just over 14 percent of the rural non-poor population lives over 1 hour from an education facility by any transportation method, this figure is over 38 percent for the rural poor (Figure 39, panel a). Similarly, nearly 26 percent of the rural non-poor population lives over 1 hour from a health care facility compared to about half (49.6 percent) of the rural poor. These figures highlight the large indirect costs the poor must bear in terms of time and travel to reach these vital facilities. In general, being over 30 minutes away from important facilities and logistics infrastructure is a strong predictor of poverty in Bhutan. For example, households farther than 30 minutes from educational and health care facilities, banks, and tarred roads are over twice as likely to be living in poverty than households within 30 minutes from such facilities (Figure 39, panel b).

Figure 39. The rural poor are the most isolated from important education and health care facilities as well as financial institutions and logistics infrastructure

a. Population living over 1 hour from education and health care facilities by poverty status



b. Poverty rates by distance to facilities



Source: Authors' calculations.

Local development planning must consider a community's unique needs and new local poverty estimates can help maximize poverty reduction.

Significant variation in poverty rates exists even within districts, indicating localized pockets of poverty that might be overlooked by broader regional assessments. New poverty maps can be used to help assess the spatial trade-offs in sustainable development, service delivery, and poverty reduction to guide regional policy priorities to the local areas most in need. While the 2022 Poverty Analysis Report presented poverty estimates at the national, rural/urban, and Dzongkhag (district) levels, small area estimation techniques were used to estimate the poverty incidence at the *Gewog*/town level in Bhutan by combining data from the 2022 BLSS and the 2017 Population and Housing Census of Bhutan (NSB and World Bank, 2023) (Figure 40), allowing for a more nuanced understanding of poverty distributions. The poverty maps highlight three key findings: (a) poverty is high in districts in mountainous areas and low in districts in the central part of the country, (b) there is a large variation in poverty rates across *Gewogs*/towns within the same district, and (c) *Gewogs*/towns with the highest number of the poor are mainly in Thimphu, Chhukha, Zhemgang, and Samtse districts. The wide disparity across *Gewogs*/towns within the same Dzongkhag/district reinforces the need to target poverty reduction, service delivery, and social protection interventions at the local *Gewog*/town level. This information could be used to support budget allocations that maximize the impact of poverty reduction

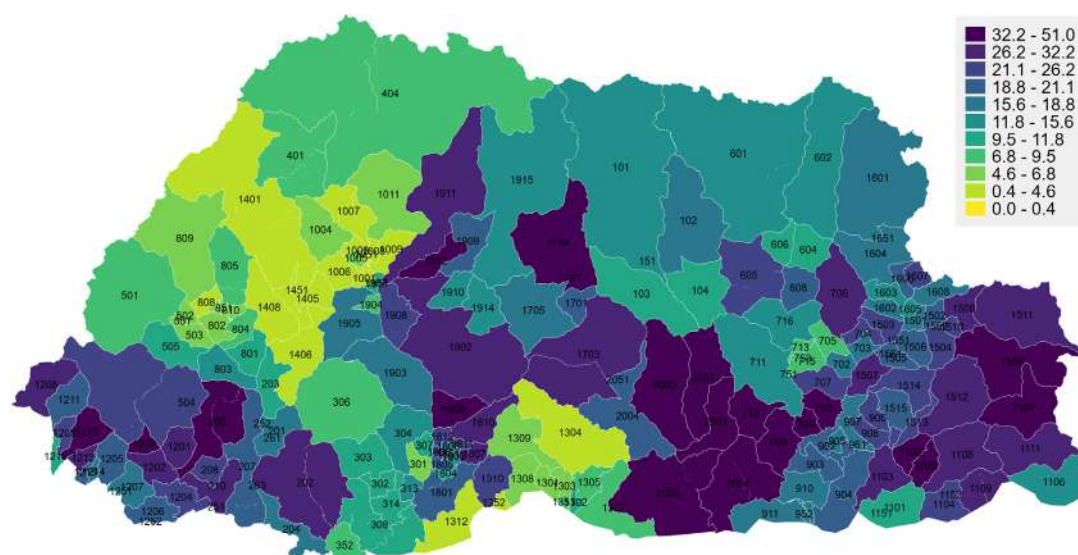
programs, while considering spatial trade-offs in service delivery, vulnerability, and hazard exposure, to boost economic growth in poor areas and narrow the income gap.

Figure 40. Subnational poverty maps

a. District-level poverty map



b. Town-level poverty map



Source: NSB and World Bank (2023).

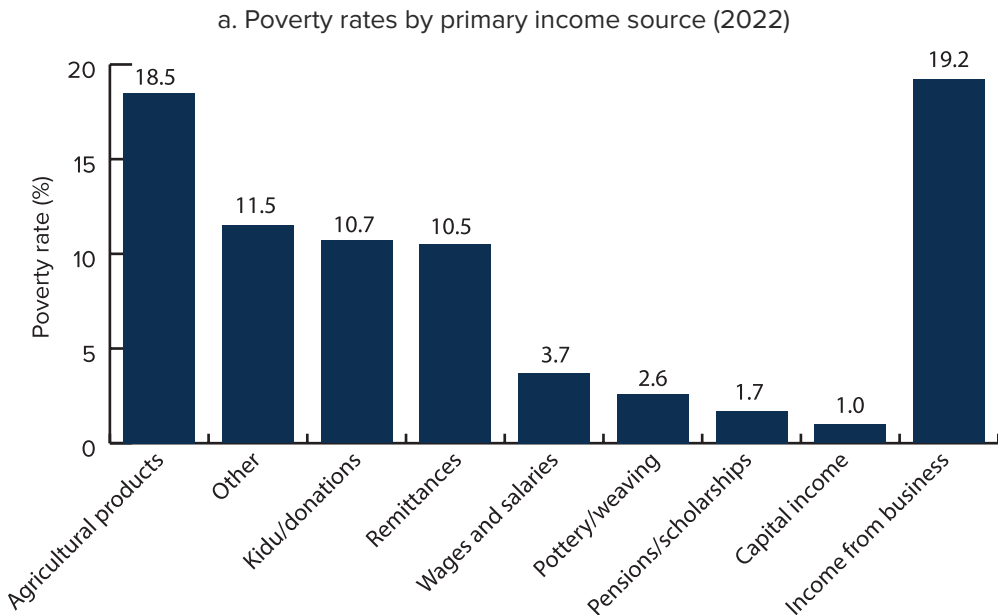
CHAPTER 5

Promoting Job Creation and Economic Diversification as Pathways Out of Poverty

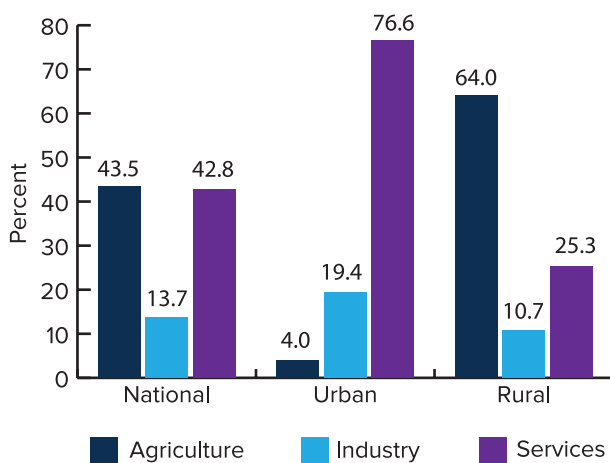
Job creation in Bhutan has been slow and the majority of the rural poor still primarily rely on income from agricultural products

Wage and salary work appears to be a pathway out of poverty; however, most rural workers still rely primarily on agricultural incomes. The poverty rates among workers who rely on wage and salary employment are much lower compared to workers who rely on agricultural products (Figure 41, panel a). For example, nationally in 2022, 18.5 percent of workers who relied primarily on agricultural products for income were living in poverty compared to 11.5 percent of workers who relied on wages and salaries. Nevertheless, 64 percent of the rural population continues to rely on agriculture (Figure 41, panel b).

Figure 41. Although poverty rates are lower outside of agriculture, the majority of rural workers still rely on agriculture



b. Proportion of employed persons by sector (2022)

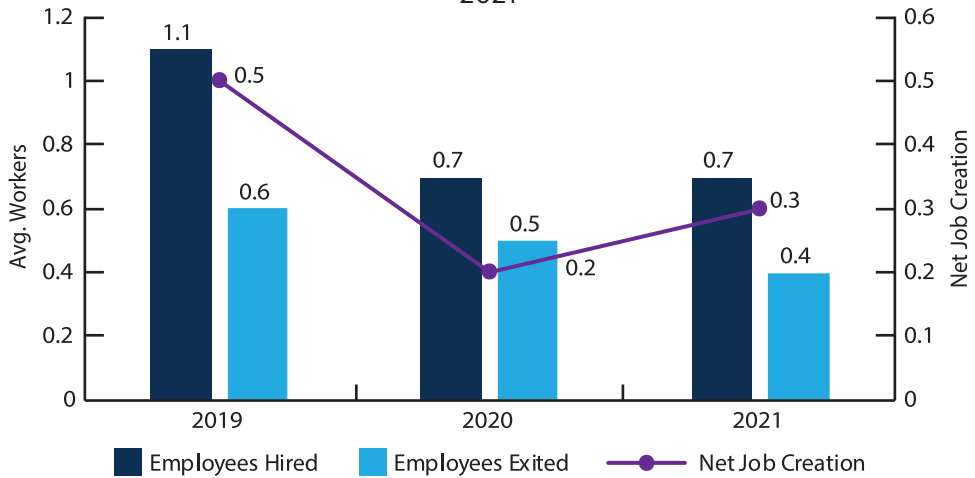


Source: Authors' calculations.

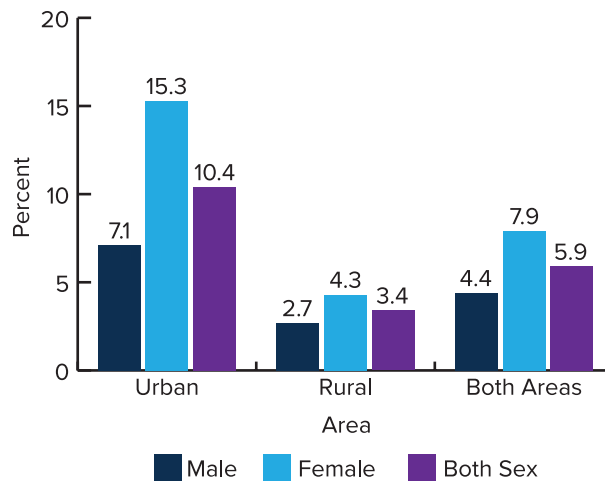
Job creation has been slow and there is substantial variation in unemployment rates between rural and urban areas, males and females, and youths. The average net job creation across firms has fallen from 0.5 workers in 2019 to 0.3 in 2021 (Figure 42, panel a). This implies that approximately one net worker was hired for every three firms in operation. The slow job growth has led to a 5.9 percent national unemployment rate. However, the national unemployment rate shows substantial variation between groups. Nationally, female unemployment is 7.9 percent compared to male unemployment rate of 4.4 percent and urban unemployment is 10.4 percent compared to 3.4 percent rural unemployment (Figure 42, panel b). Unemployment is primarily driven by youth unemployment, which reached a peak of 28.6 percent in 2022, up from a low of 7.2 percent in 2012 and from 20.9 percent in 2021 (Figure 42, panel c).

Figure 42. Job creation has been slow and unemployment has been high among rural, urban, and youth populations

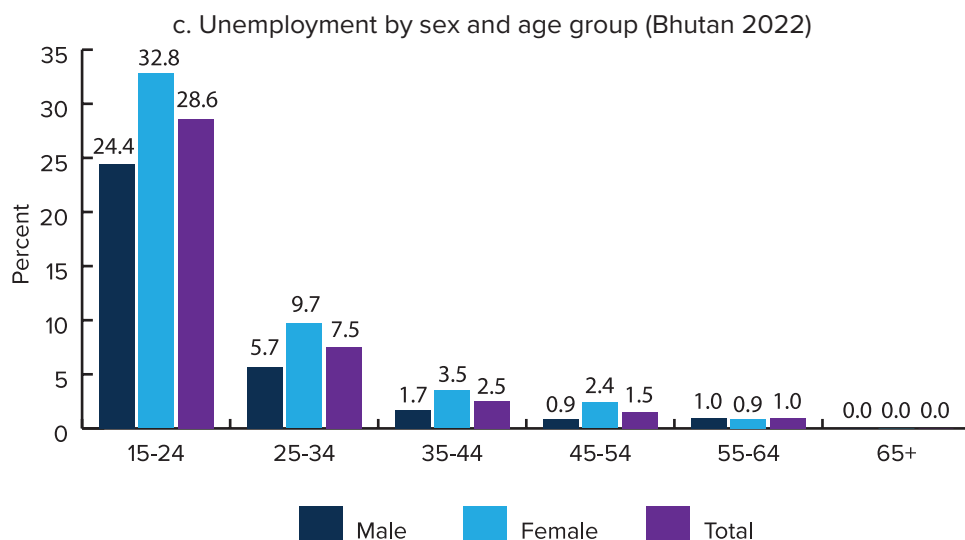
a. Average number of workers hired and exiting firms and net job creation, Bhutan 2019–2021



b. Unemployment rate by sex and area, Bhutan 2022



Source: Bhutan 2022 Labour Force Survey Report 2022.



Source: Authors' calculations.

Youth transitions from education to employment are challenging and there is a need to both support job creation and ensure the youth have the skills and education needed for the job market

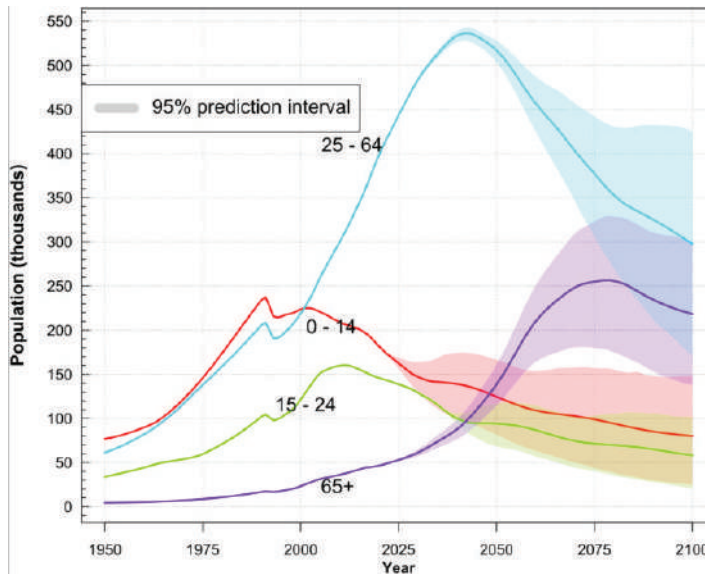
Despite achieving higher educational levels, transitioning into employment remains a challenge for youth. The unemployment rates are highest for those who have completed higher secondary education, at 18 percent, and a bachelor's degree, at 15 percent, compared to 6 percent nationally. The higher unemployment rates are likely driven by those who recently completed their studies and are searching for employment as 31.2 percent of the unemployed cited completing their studies recently as the reason for being unemployed. However, qualification mismatches and lack of skills and experience were reported as the primary reason for being unemployed by 43.1 percent of jobseekers. This highlights the need to ensure education and training programs provide students with the qualification and skills needed to successfully transition into the job market.

Both supporting job creation and ensuring youth have the skills and education needed for the job market are important to fully realize the demographic dividend.

About half of the population of Bhutan is under age 30 years. The prime working-age population of ages 25 to 64 years is expected to increase until around 2050 (Figure 43). If Bhutan can incorporate the aging youth population into employment, it could create a demographic opportunity for development as the share of workers earning income outweighs the dependent population, thus creating a 'demographic dividend'.

Figure 43. The working-age population of Bhutan is expected to grow until 2050 presenting an opportunity to capture the demographic dividend

Population by age groups in Bhutan with forecasts to 2100

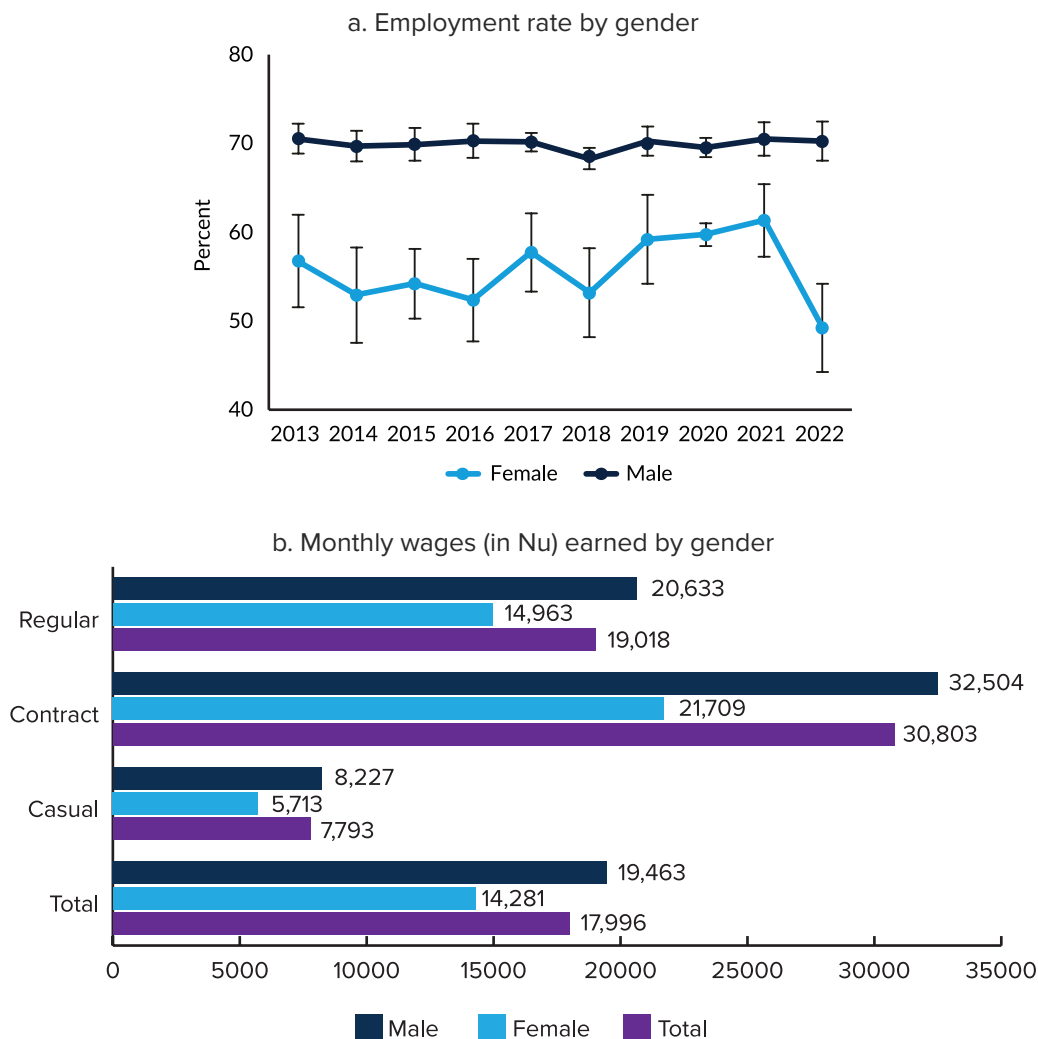


Source: United Nations Population Division. <https://population.un.org/wpp/Graphs/DemographicProfiles/Line/64>

Females appear particularly vulnerable in the labor market where their employment rate has been more volatile and their pay less than that of males.

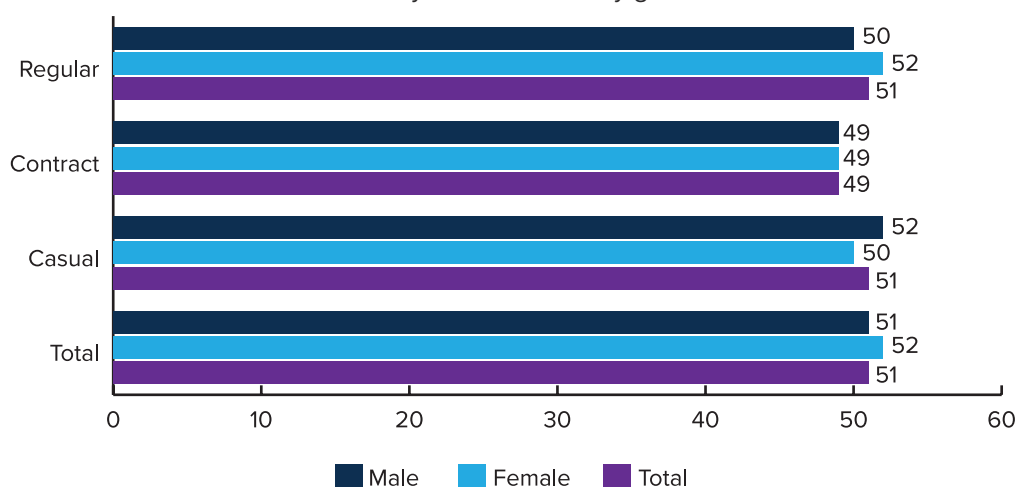
Female employment exhibits high variation and after several years of modest gains from 2018, female employment declined in 2022 to historical lows (Figure 44, panel a). This is likely in part due to women's roles outside of the labor market, as women perform 71 percent of unpaid household and care work and generally bear a larger burden if a household member falls ill or if the household is affected by another shock, such as a climate-related disaster. Maternity allowances and childcare facilities are also usually not adequate, resulting in a higher attrition rate of female employees. Furthermore, female wage and salaried workers are paid about 26 percent less than men, on average, even though they work slightly more hours (Figure 44, panel b). Women are more likely to work for small, single proprietorship establishments in food and accommodation, earning relatively lower wages. However, the gender wage gap persists despite controlling for firm type, sector, and other worker characteristics.

Figure 44. Female employment rates are volatile and women earn about 26 percent less than men despite working slightly more hours



Source: Authors' calculations.

C. Weekly hours worked by gender

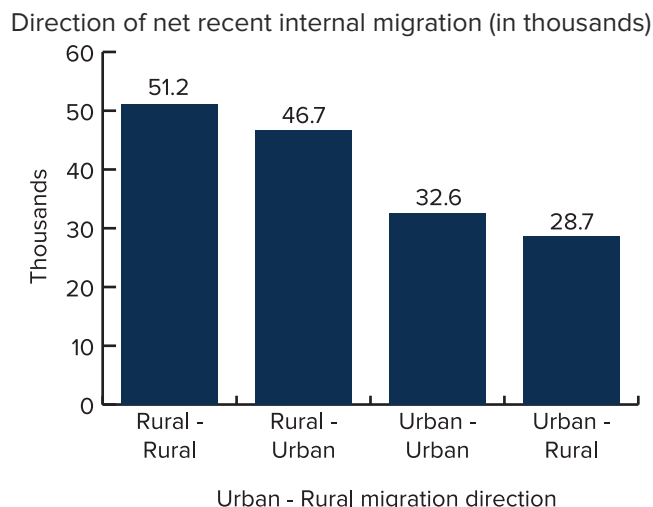


Source: Authors' calculations.

Improving the quantity and quality of jobs will be important for future economic growth and poverty reduction

Approximately 18,000 new urban residents per year, equivalent to about 2 percent of the total population, may be contributing to urban unemployment, as job creation cannot keep up with the growing urban population. Between 2017 and 2022, the urban population of Bhutan grew from 40 percent to 44 percent of the total population. A study of internal migration found that around 46,700 people move from rural to urban areas per year and 28,700 people move from urban to rural areas, leading to a net gain of approximately 18,000 new urban residents (Figure 45). Consistent with urban unemployment, rural-to-urban migrants are typically young (15–24 years) and in search of employment (53 percent) and education (30 percent) opportunities.

Figure 45. Rural-urban migration is putting pressure on the urban job market as job creation cannot keep up

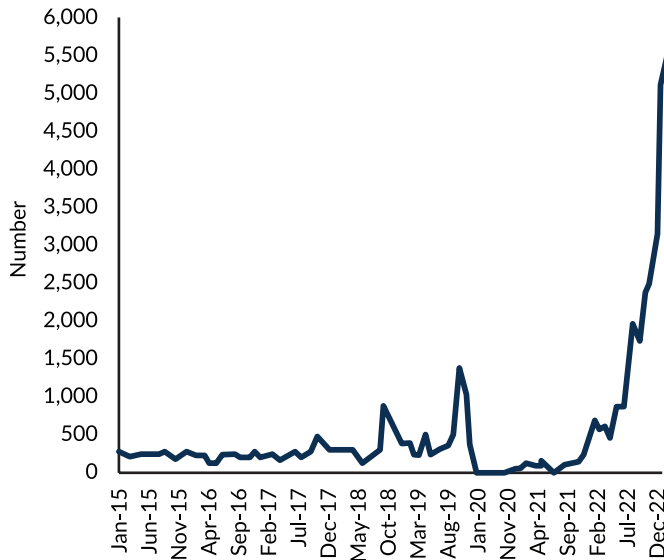


Source: Authors' calculations.

Owing to the lack of opportunities, youth and skilled workers are searching for employment opportunities outside of Bhutan. Around 70 percent of registered jobseekers are actively seeking overseas employment (Ministry of Labour and Human Resources, 2022) and emigration surged in late 2022 and through early 2023 as over 5,000 migrants left Bhutan through the Paro Airport (Figure 46). This large number does not include others who may have left through other land exits. While emigration may support remittances, there are concerns that the most skilled and educated are leaving, particularly from public service positions, and this may lead to a deterioration in quality of public services and other economic sectors more broadly.

Figure 46. High unemployment may be contributing to emigration, as workers search for employment opportunities abroad

Monthly migration, Paro International Airport (January 2015–March 2023)



Source: Kuensel (May 20, 2023). <https://kuenselonline.com/migration-of-bhutanese/>.

There is current evidence that Bhutanese moving abroad are more likely to be highly educated and are attracted by the better employment and education opportunities abroad. To better understand the reasons behind emigration (that is, the push and pull factors) and to assess potential solutions to retain students and workers in Bhutan, a rapid quantitative phone survey was administered in mid-2024.¹⁴ The survey obtained information on three categories of households: 465 households that had at least one member who recently migrated abroad, 143 households with a member that is aspiring to migrate abroad in the near future, and 600 households whose members plan to remain in Bhutan to study or work.¹⁵ The data on preferred migration destinations show that both current and aspiring emigrants prefer Australia, with a substantial 87.1 percent of current emigrants and 74.2 percent of aspiring emigrants indicating Australia as their destination. The results show a strong correlation between education levels and migration status. More than half of current

14 The migration survey was implemented as a joint effort between the Poverty and Equity Global Practice (GP) and the Social Protection and Jobs GP to inform the design of the impending jobs operation and policy dialogue around the Bhutan emigration issue. A separate report on the migration study is being prepared by the team.

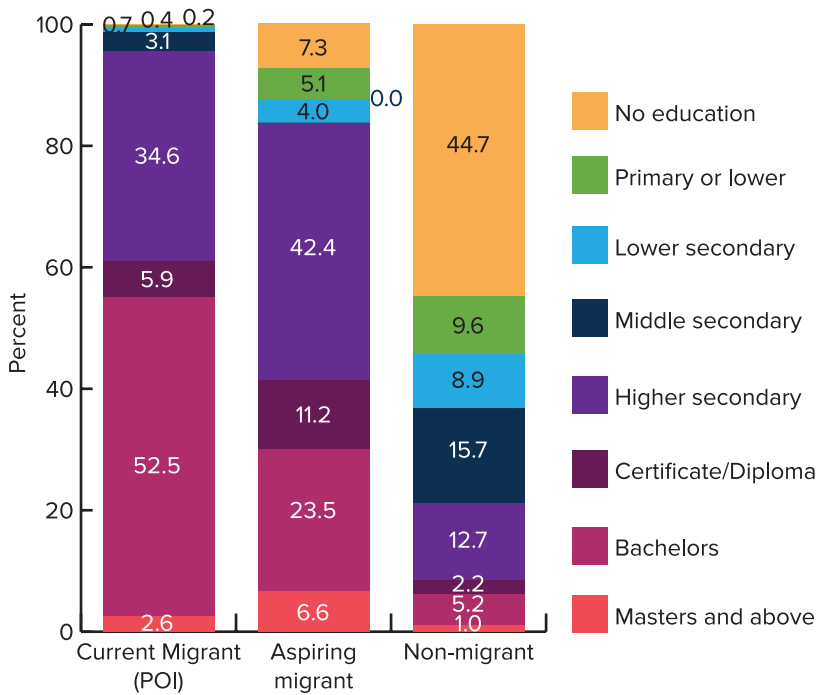
15 The survey sample targeted 2,000 households across all districts of Bhutan to capture potential heterogeneity in reasons for emigration. While the sample was adjusted (re-weighted) post data collection, given its small size, it may not be perfectly representative of the entire Bhutanese population abroad. However, it provides useful insights into the push and pull factors of migration out of Bhutan.

migrants (52.5 percent) have a bachelor's degree (52.5 percent), compared to 23.5 percent of aspiring migrants and 5.2 percent of non-migrants (Figure 47, panel a). Current and aspiring migrants generally have some education at least compared to nearly 45 percent of non-migrants with no formal education. This indicates that education is a key factor in migration aspirations and actions, as those with higher education are more inclined to migrate or aspire to, whereas lower education levels correlate with non-migration.

Employment and education opportunities are the main reasons Bhutanese are emigrating (Figure 47, panel b). Of those that emigrated, 49.2 percent said their primary motivation was for better opportunities abroad. Those aspiring to move abroad cite having no suitable options to study or no suitable job in Bhutan as their top reason with 49.5 percent respondents listing this as their primary motivation. This is followed by low earnings (38.3 percent) and poor quality of financial services (26.5 percent) as reasons for wanting to go abroad. Others report no job satisfaction (14.3 percent), no job security (13.2 percent), lack of flexibility for working professions to upgrade qualifications (11.8 percent), and none to few opportunities or avenues to progress in their job (12.4 percent). In line with this, aspiring emigrants report expecting to earn more in their destination country than in Bhutan (60.2 percent), perceiving better quality of education (40.8 percent) and more suitable opportunities abroad (32.5 percent). Others report wanting to move closer to the existing Bhutanese diaspora (28.2 percent). While those who moved abroad mostly found employment in salary or wage work (34.8 percent) or as a casual laborer (17.9 percent), many of the emigrants continued their education abroad with 30.9 percent working and studying and 13.6 percent studying without work.

Figure 47. Migrants moving abroad are more likely to be highly educated and they are attracted by better employment and education opportunities abroad

a. Distribution of current migrants, aspiring migrants, and non-migrants by educational level



b. Motivation to migrate out of Bhutan for aspiring migrants



Source: World Bank Bhutan Migration Report (2025, forthcoming).

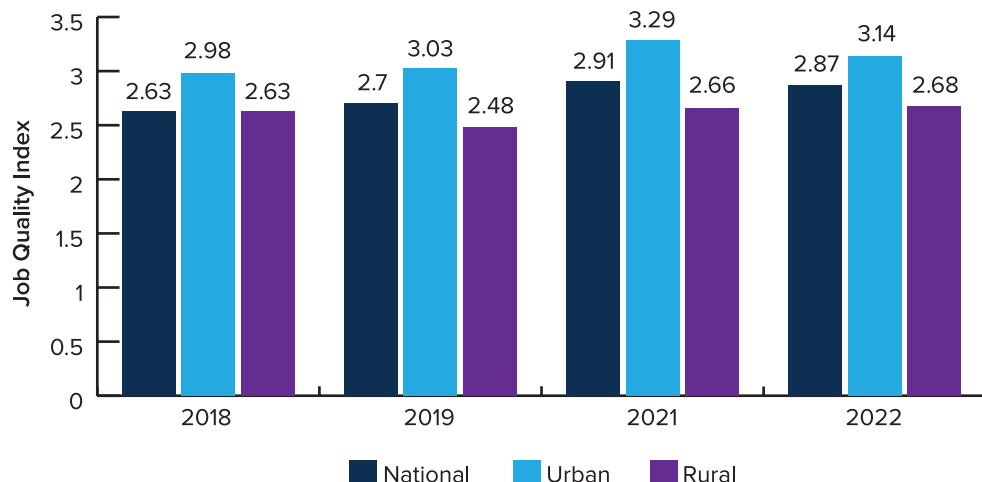
Although over half of the emigrants send remittances back to Bhutan, there is a substantial risk of brain drain and loss of human capital, which could be reduced with more opportunities in the private sector and improved working conditions in Bhutan. Remittances sent back by emigrants are often not able to mitigate the negative impact of brain drain. The rapid survey results show that just over half of the emigrants send remittances back to Bhutan. However, 36 percent of family members are considering moving to the host country of the emigrant, which would reduce remittances. Therefore, it is important to improve labor market conditions to encourage workers to remain in Bhutan. Indeed, most Bhutanese would like to stay in or return to their country if they could find quality jobs. For example, according to the survey respondents, 64.6 percent of migrants abroad intend to move back to Bhutan in the future and they would consider returning, if they were offered a mean monthly income of around Nu 77,620 (equivalent to about US\$925 based on the October 31, 2024, exchange rate). Similarly, 77.7 percent of aspiring migrants intend on returning to Bhutan and 55.7 percent said they would stay if they could find a decent job with

a mean monthly salary around Nu 63,622. While 37.6 percent of aspiring migrants would reconsider moving abroad if working conditions improved, 82.7 percent of public sector employees said they would reconsider their plans to emigrate if working conditions and labor policies improved. This highlights the central role the labor market plays in migration decisions and how labor policies could reduce emigration and loss of human capital.

Owing to the lack of high-quality, stable jobs, the unemployed overwhelmingly prefer to work for the government, further highlighting the need to expand quality jobs in the private sector. Improvements in the Job Quality Index (JQI) slowed in 2022 as stability and satisfaction decreased (Figure 48).¹⁶ While rural job stability at 85.7 percent is higher than urban stability at 74.8 percent, the excessive work hours in rural jobs, presumably primarily in agriculture, lead to lower job satisfaction and a lower ranking on the JQI Index overall. Despite the improvements in other areas (that is, income, benefits, and stability) in recent years, job satisfaction has not significantly increased, indicating potential issues in work conditions or expectations. This underscores the need for policies that enhance not just the quantitative but also the qualitative aspects of employment. The unemployed overwhelmingly state a preference for government work across both rural and urban areas, likely due to their perceived stability and job satisfaction (Table 10).

16 The JQI for Bhutan is estimated for the population older than 15 years and includes four dimensions: (a) Benefits measured by health insurance coverage, which is universal in Bhutan; (b) Satisfaction composed of not working excessive hours, not working a second or additional paid jobs, and being fully employed or not wanting to work more; (c) Stability measured as whether a worker has been working in their current occupation for more than three years; and (d) Income estimated as earning above US\$3.65 per day.

Figure 48. Job quality stagnated in 2022 and the unemployed overwhelmingly prefer government work, likely due to their perceived stability and satisfaction



Source: Poverty and Equity GP South Asia Data and Statistics Team, World Bank (June 2023) based on LFS 2021–2022.

Table 10. Type of enterprise preferred by unemployed persons by sex and area, Bhutan 2022

Reason for being Unemployed	Urban			Rural			National		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Government	72.9	77.3	75.4	77.1	84.1	81.0	74.5	79.8	77.5
Armed Force	4.5	1.5	2.8	5.2	1.8	3.3	4.8	1.6	3.0
Government Corporation	3.7	4.9	4.4	5.9	6.5	6.2	4.6	5.5	5.1
INGOS and NGOS	1.2	2.8	2.1	0.9	0.6	0.7	1.1	2.0	1.6
Private	17.7	13.6	15.4	10.9	7.1	8.7	15.1	11.1	12.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Authors' calculations based on BLSSs and LFSs.

PART III

**Priorities for
Sustainable
Poverty Reduction
and Equity**



CHAPTER 6

Policy Directions for Sustainable Poverty and Inequality Reduction

The core challenges that remain for Bhutan include **boosting productivity growth and employment opportunities, especially among youth and women, and promoting adaptation and resilience to climate change.**¹⁷ This report identifies three key challenges that must be addressed to ensure poverty and inequality reduction: (a) Promoting high-quality job creation and workforce human capital development; (b) Strengthening resilience to climate shocks, given the country's vulnerability to climate-related events; and (c) Addressing geographic disparities, especially in service access and quality across districts. Bhutan's continued progress depends on addressing these challenges and implementing targeted policies that support equitable growth, poverty reduction, and resilience building.

¹⁷ According to the South Asia Development Update (October 2024), most of these challenges are common across South Asia.

Several policy directions to address the constraints emerge from these challenges facing the country. The policy directions are summarized in Table 11.

Table 11. Policy directions for continued poverty and inequality reduction in Bhutan

Challenge	Constraint	Suggested policy direction
1. Promoting high-quality job creation and workforce human capital development		
Limited creation of high-productivity jobs in the private sector, which partly explains the speed and scale of recent emigration.	Wage and salaried jobs are pathways out of poverty, but the development of productive sectors outside of agriculture and the public sector has been slow.	Pursue a vertical approach to promoting the growth of promising job-rich sectors. At the same time, implement horizontal reforms across all sectors to improve the productivity of small firms and support their growth. These reforms include (a) strengthening entrepreneurship by facilitating access to finance, mentorship, and links to supply chains and markets; (b) governance reforms related to the investment climate, foreign direct investment, and the efficiency of state-owned enterprises; and (c) labor market reforms to promote flexible labor regulations that can support worker mobility and firms' access to labor as well as a functional labor market information system (LMIS) that can regularly identify skills in the labor market and support hiring needs for start-ups.
	Many workers have low-quality employment with no written contracts and high share of overwork.	
	Opportunities to assimilate youth in the private sector are limited and contribute to emigration.	
Rural workers continue to rely heavily on low-productivity agriculture.	The rural poor rely overwhelmingly on agriculture and often lack access to training to improve their productivity, to inputs and markets, and to protection against climate change vulnerabilities.	Provide a targeted, comprehensive package of economic inclusion services that includes skills training in technical areas, climate mitigation, and business and risk management practices. System links between multiple ministries can support the delivery of a coordinated package of services and maximize its impact.

Challenge	Constraint	Suggested policy direction
Limited human capital utilization, particularly of youth and urban residents	There is suboptimal allocation of labor to meet employers' hiring needs contributing to high unemployment among youths and urban residents.	The following efforts are needed to strengthen employment support programs for youth and urban residents: (a) reorient the technical and vocational education and training (TVET) sector to improve the links with the private sector; (b) allocate appropriate resources to improve the capacity of employment services centers (ESCs) to establish relationships with local employers, engage in vacancy collection, and provide services such as on-the-job assistance, counseling, and mobility support for low-skilled workers; (c) implement programs to bridge the gap between labor supply and demand, such as on-the-job training; and (d) enhance the capacity of the existing LMIS to reduce data gaps and better understand the profiles of workers and how they align with the skills and occupations demanded by the private sector, thereby reducing skill mismatches.
Limited human capital accumulation	The productivity of Bhutan's workforce is undermined by low levels of human capital that stem in part from unequal and inadequate access to quality foundational human capital services, especially for disadvantaged households in rural areas. Many Bhutanese perceive the quality of education better abroad with more economic opportunities to support themselves during their studies, contributing to emigration and brain drain.	Improve efficiency of targeted government resources to ramp up investments in access to high-quality education, addressing spatial disparities in access. Improve the quality of higher education to be competitive internationally and implement policies that support working while studying.

Challenge	Constraint	Suggested policy direction
Female labor force participation and employment rates are low and volatile.	Social norms may reduce females' opportunities in the labor market, as women generally bear a larger burden if the household is affected by a negative shock. Maternity allowances and childcare facilities are usually inadequate, resulting in higher attrition rates of female employees.	Offer as part of existing active labor market programs (ALMPs) or by ESCs under the Ministry of Industry, Commerce, and Employment (MoICE) targeted information and awareness campaigns, as well as group training sessions on female agency, empowerment, and the benefits of women's work. Strengthen ALMPs in the short term to provide childcare subsidies for low-income families with young mothers. A medium-term agenda can focus on expanding access and improving the quality of early childhood care.
2. Strengthening resilience to climate shocks, given the country's vulnerability to climate-related events		
Climate hazard exposure, compounded by climate change, poses risks to lives, livelihoods, and assets.	Bhutan is exposed to natural hazards, including floods, landslides, cloudbursts, windstorms, cyclones, river erosion, earthquakes, glacial-lake outburst flood (GLOF), wildfire, and droughts. Most of the country's infrastructure is located along drainage basins that are highly vulnerable to flooding caused by heavy monsoon rains and glacial melt. Projected increases in days with heavy precipitation could raise the risk of flooding and affect runoff, erosion, and river discharge rates. Climate change is expected to affect water resources through loss of storage in the form of ice and changes in precipitation and flow patterns, causing more floods and droughts.	Enhance the country's resilience to climate hazards and the impacts of climate change by supporting the RGoB's whole-of-government approach to disaster risk management by (a) integrating climate and disaster resilience into critical infrastructure and buildings and (b) strengthening systems for natural disasters' early warning systems and financial resilience of property.

Challenge	Constraint	Suggested policy direction
A large share of the population remains vulnerable to poverty.	Climate shocks can lead to job loss or income loss from hazard exposure, which risk further impoverishing or pushing households into poverty.	Develop and strengthen a comprehensive, shock-responsive, and inclusive social protection system by formulating policy frameworks aimed at reducing vulnerabilities across the life cycle. Expand noncontributory benefits and advance disability inclusion to promote inclusive and sustainable social protection schemes for the disadvantaged and vulnerable. Implement interoperable welfare and information management systems. Support the preparedness of social protection systems to better anticipate and respond to shocks.
Agriculture sector is particularly vulnerable to climate shocks.	Climate change is expected to alter Bhutan's yield structure. Short-term climate-induced yield changes may temporarily increase output but risk distracting from longer-term diversification and growth opportunities.	Provide (digital) extension services and financial incentives to farmers to adopt sustainable land management practices, increasing productivity and ensuring climate-resilient agricultural production. Enhance irrigation infrastructure and eliminate regulatory obstacles to cultivate export-oriented crops on paddy land and irrigate non-paddy crops to boost productivity, enable climate change adaptation, and drive structural transformation in agriculture.

Challenge	Constraint	Suggested policy direction
3. Addressing geographic disparities, especially in service access and quality across districts		
Access to basic services has improved, but large disparities in access to quality services persist across the country.	Electricity disruptions, lack of access to 24-hour drinking water supply, and low access to reliable internet are prevalent in many areas. Across the country, the majority of households still treat water to make it safe to drink.	Continue investing in human capital and improving service delivery to boost labor productivity and create productive and high-quality jobs. Bhutan's unique terrain and dispersed population make service provision difficult and costly. Therefore, it is necessary to develop a Resource Allocation Framework (RAF) that ensures fairness, transparency, and effectiveness in resource allocation to address local development needs. Central agencies should work with local governments to implement plans that show a clear understanding of the spatial trade-offs in coverage, the cost of administering and maintaining quality services, and the effectiveness of services.
The poor and vulnerable, particularly in rural areas, are more isolated from health care and education facilities as well as financial institutions and road infrastructure.	Poor households may face high indirect costs, such as travel and accommodation costs, to attend education or visit a health care facility. Lack of road infrastructure may limit ability to access markets.	Encourage private sector participation through public-private partnerships to fund and manage infrastructure projects, leveraging private capital and expertise while ensuring public interest and accountability.

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